Dec., 1954 35 cents

PACIFIC FISHERMAN

Tripartite Research Emerges p9

Tuna Fishing Costs Analysed p45

P.7 15 20 33 P.45

DEC 1954
LIBRARY
POFI
FISH & WILDLIFE
SERVICE

Flags Fly as the 8th Annual Fishermen's Fiesta Opens the sardine season in Southern California.

A MILLER FREEMAN PUBLICATION

Polaris Sets Amazing Record with Gargoyle Lubricants

Skipper Arne Einmo at the wheel of the Polaris.

In long fishing hauls that have taken her to such far-away points as the Aleutian Islands and the coast of Mexico, the schooner Polaris has set an amazing performance record with Gargoyle marine oils—22 years with original pistons and piston liners.

Skipper Arne Einmo of Seattle reports that although the Polaris is often at sea for more than a month at a time, its 175 HP Atlas engine has never been re-bored.

"We've had such outstanding performance with Gargoyle oils, we always make sure we have a drum aboard so we won't have to use another oil on our long tuna and halibut runs," Einmo says.

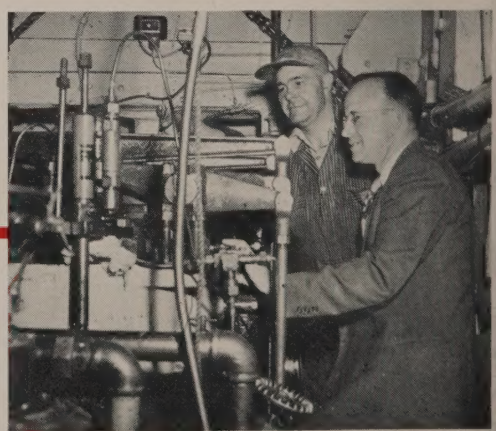
SOCONY-VACUUM

GENERAL PETROLEUM CORPORATION

Converting nature's gift for better living

2-1012

No matter what kind of boat you operate, there's a performance proven Gargoyle marine lubricant to protect its costly engine every working mile. Visit your friendly General Petroleum marine distributor the next time you're in port for the absolute tops in service and product quality!



G.P. Marine Representative Ted Rasmussen, right, discusses cylinder lubrication with Arne Einmo in the Polaris engine room.

PACIFIC FISHERMAN

Vol. 52 No. 13

December, 1954

Pacific Salmon Research Emerges 9
Where Runs Sovereignty at Sea? 17
California Canners Count Gains 17
Vigilance Is the Price of Fish 20
Alaska Fish Research Stepped-Up 23
What It Costs To Catch Tuna 45
Canning Salmon on a Ferry 56

DeWitt Gilbert
Editor

Charles L. Shaw
Associate Editor

Stuart F. Leete
Associate Editor

Carlton L. Hillyard
Advertising Mgr.

Mrs. Helen McCauley
Associate Editor

Richard N. Crosby
Eastern Mgr.

A. W. Ponsford
Southwest Mgr.

Miller Freeman
President

Lawrence K. Smith
Vice President

William B. Freeman
Vice President

Miller Freeman Jr.
Secretary-Treasurer

Publishing Office
534 S.W. 3rd Ave., Portland 4, Oreg. ..... BEacon 6348

Editorial and Advertising Office
71 Columbia St., Seattle 4, Wash. ..... MAin 1626

Regional Offices
370 Lexington Ave., New York 17 ..... MUrray Hill 3-9294
1791 Howard St., Chicago 26, Ill. ..... ROgers Park 4-3420
402 Pender St., W., Vancouver, B.C. ..... MArine 7287
815 Witmer St., Los Angeles 17 ..... DUnkirk 9-1112
121 Second St., San Francisco 5 ..... GArfield 1-5887
315 N. Avalon, Wilmington, Calif. ..... TErminal 4-4538
3518 Dante St., New Orleans 18 ..... AMhurst 2762

SUBSCRIPTION RATES: U. S. and Canada—one year $3.00; two years $5.00; three years $7.00. Other countries — one year $4.00; two years $7.00.

CHANGE OF ADDRESS: Please send notice of change of address to 121 Second St., San Francisco 5, Calif., as early as possible and include both old and new addresses, plus zone number at new address.

ADVERTISING: Complete plates only should be sent to Pacific Fisherman, 235 N. W. Park Ave., Portland 9, Ore. . . . Advertising copy and cuts, instructions and insertion orders should be sent to the Seattle office.

PACIFIC FISHERMAN (with which is combined West Coast Fisheries). Published monthly except January when publication is semi-monthly, by Miller Freeman Publications, at 534 S. W. Third Ave., Portland 4, Ore. Entered as second class matter at the post office at Portland, Ore., under Act of March 3, 1879. Postmaster, please send Notice 3579 to PACIFIC FISHERMAN, 121 Second St., San Francisco 5, California.

A MILLER FREEMAN PUBLICATION

Early Sardine Fishing Registers Sharp Increase

• The second dark of the 1954-1955 Southern California sardine season produced a little less than the 30,000 ton quota established by negotiation between the Fishermen's Cooperative Association, the canners, and the two fishermen's unions. The agreement also provided for the acceptance of 5,000 tons of mackerel.

The first dark was strictly a non-fishing period, because canners and fishermen could not agree on price or quota.

On Friday night, November 5, the fleet landed a little less than 900 tons and from Sunday-night fishing, the last night of the November dark, the fleet produced an estimated 1,000 tons. Unions and boat owners were reported to be attempting to raise the quota of sardines to 35,000 tons, as this issue of *Pacific Fisherman* was prepared for press.

The San Pedro fleet began the 1954 season October 24, when a price of $47.50 per ton for pilchards was agreed-upon. That first night's fishing amounted to 3,500 tons, more than was taken in all areas for the entire previous season. Mackerel at this time was selling for $50 for Jack, $55 for Pacific.

The current contract stipulates that the canneries are to accept a quota of 30,000 tons of sardines and 5,000 tons of mackerel. The canners also stated they would guarantee the purchase of a minimum of 30 tons of sardines or 20 tons of mixed sardines and mackerel per day per boat.

Last year sardines sold for $100 a ton, but only 3330 tons were landed for the season. California Fish and Game officials believe that the sardine population now being fished by San Pedro boats originates off the West Coast of Mexico, and they do not predict that the current rate of production will continue to hold-up.

What's more, the fish being taken now are of the three to four year class, declare the biologists, with no indication of any dominant year class, and no hope for an abundant spawning. Sardines, during the November dark, were ranging in size, following the 1953 pattern, from nine to 10 inches.

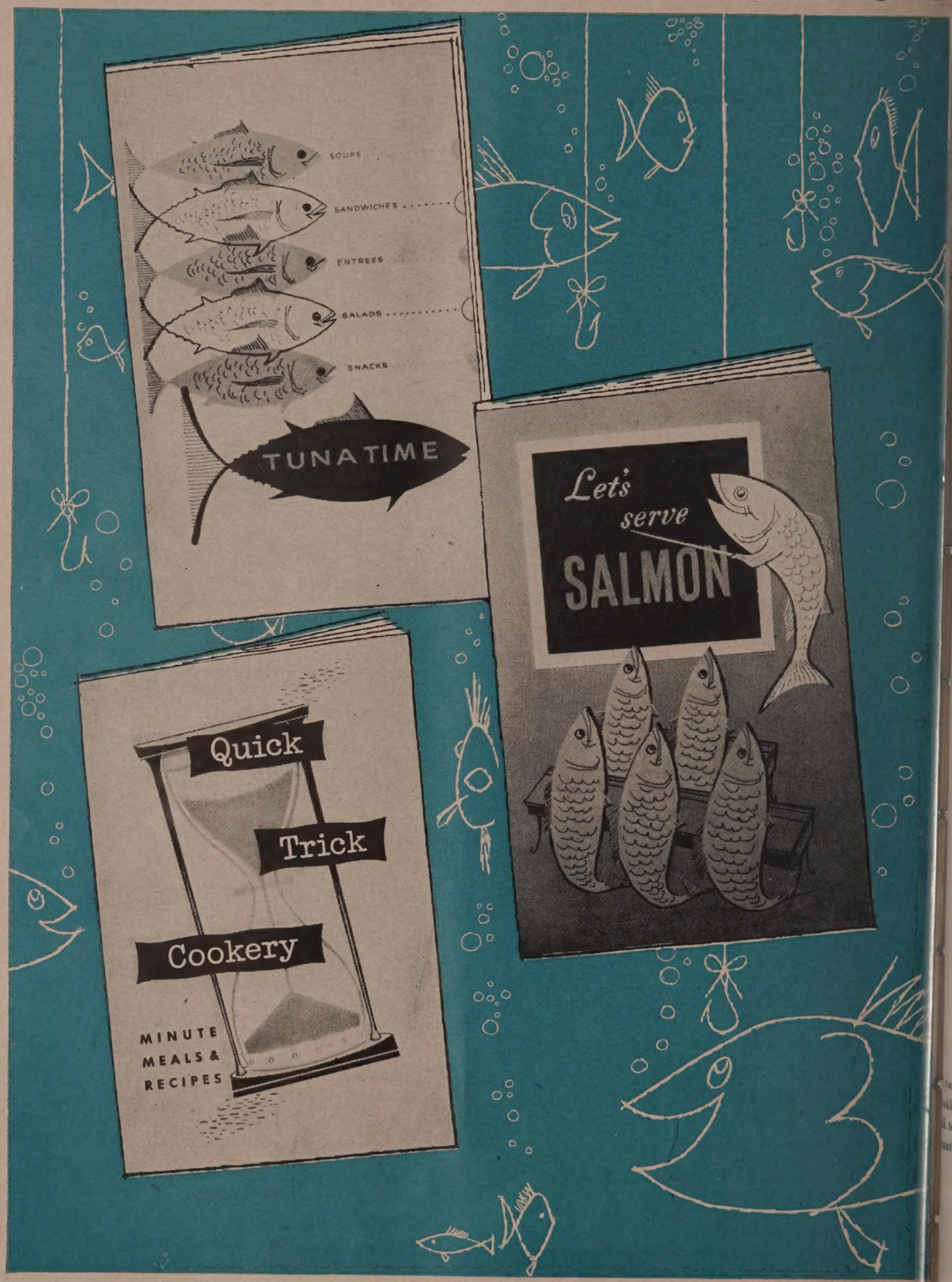
The opening nights of the second dark found most boats centered in the Newport-Huntington Beach area, fishing in 10 fathoms. Two planes were employed at that time for daylight fishing. When this type of fish-spotting is used, the pilot serves as a mastman, with communication by short-wave. The plane directs the entire set. When a plane is so employed, the pilot receives one share per boat utilizing the plane's services.

After several days of day fishing, the fleet began its traditional night sets, moving northward as the dark extended. November 2 saw a sharp decline in production.

Most of the boats from Monterey have been delivering to Port Hueneme or Santa Barbara.

The barge *Mary*, owned by Pan Pacific Fisheries, Inc., Terminal Island, is the center for information on the activities of the sardine fleet.

Union regulations (AFL and ILWU) require that each boat fishing sardines-mackerel must inform the *Mary* of the night's catch, and the approximate time of unloading. Penalty is the forfeit of a night's fishing.


SOUPS
SANDWICHES
ENTREES
SALADS
SNACKS
TUNATIME
Let's serve
SALMON
Quick
Trick
Cookery
MINUTE MEALS & RECIPES

The new Canco "Trio" that will boost your sales!

These three recipe books remind meal planners that with canned fish—all kinds of canned fish—they can prepare scores of interesting, economical meals. Canco is busy telling the public *your story.*

TUNA TIME . . . Canco's home economists have turned the spotlight on tuna. Just off the press is this booklet featuring new recipes for quick meals using tuna. This booklet is being offered to home economists, students and dietitians from coast to coast. Canco proves that any time is "Tuna Time"!

LET'S SERVE SALMON . . . Here's a new recipe book containing twenty new and different ways to serve salmon. Developed in Canco's test kitchens by Canco's home economists, these recipes are being distributed to home economists, dietitians and the managers of school lunchrooms and cafeterias all over America.

QUICK TRICK COOKERY . . . This handsome and valuable booklet contains recipes calling for a wide variety of canned fish—anchovies, clams, codfish, crab meat, herring, lobster, mackerel, oysters, salmon, sardines, shad roe, shrimp and tuna! It has been offered to homemakers everywhere in Canco's beautiful full-color consumer ads in *Life, McCall's* and *Good Housekeeping,* as well as to home economics teachers and dietitians.

No other container manufacturer offers you this kind of support.

By stimulating America's appetite for canned fish products and showing homemakers and potential homemakers how to serve all kinds of canned fish products interestingly and attractively, Canco is helping to sell more of the products you pack.

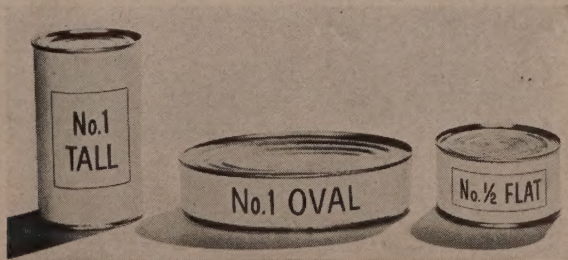
Go first to the people who <u>are</u> first!

AMERICAN CAN COMPANY

CANCO

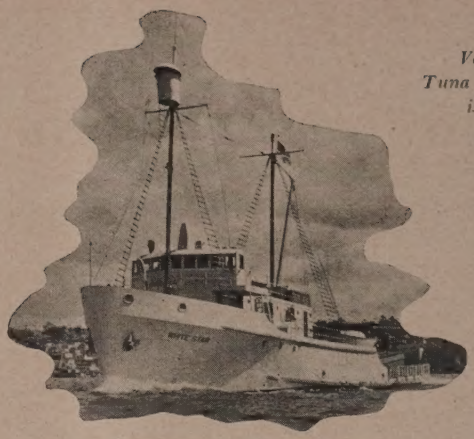
New York, Chicago, San Francisco; Hamilton, Canada

If you would like copies of these booklets for your own promotion, talk to your Canco salesman about quantity and price.

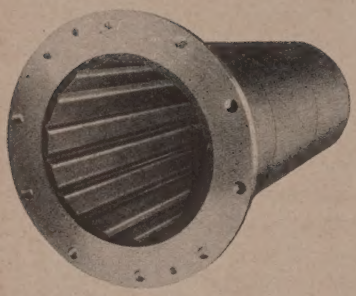


Canco offers you the finest full line of cans for fish and fish products available anywhere. *Whatever* your need, *wherever* your need, Canco has the *right* package.

Make Fishing Pay



Van Camp Sea Foods Tuna Clipper WHITE STAR is Cutless Equipped



Soft Rubber Water Lubricated

Increase your profits through savings. Savings made possible only by Cutless bearings—the soft rubber, water-lubricated bearing that outlasts all other bearings 15 to 1. Longer bearing life cuts drydock time and expense—less shaft wear, too. Lower operating costs means more profits for you.

Large west coast stocks popular sizes. Factory stocks to 10-inch shaft size available overnight by air.

See your ship repair yard, marine supplier or write to—

LUCIAN Q. MOFFITT, INC.
AKRON 8, OHIO
Engineers and National Distributors

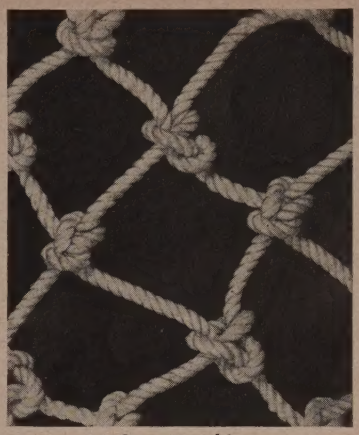
B.F.Goodrich *Cutless* BEARINGS
PROPELLER SHAFT

"G. Ms. '4-51' DIESEL IS THE SWEETEST MARINE ENGINE A BOAT OWNER CAN OPERATE"

Fred Bobsien, Captain of the "Merrimac" a "Sportsfisher" says, "I replaced a gas engine earlier this year with my '4-51' G. M. Diesel and can already show a $130 a month saving in fuel alone. If General Motors made this engine five years ago I'd have bought it then, 'cause it's the only Diesel made that is small enough to fit my boat. Those boys at West Coast Engine & Equipment Co. surely know their business. The '4-51' has greater power. Now I can fish one hour longer on a Farallon Island run than before and be in at the dock with the rest of them. It has increased the rideability of my boat 100% and my passengers feel absolutely safe in any kind of weather because this G. M. '4-51' runs just like a fine watch all day long and every day of the week. It's the sweetest marine engine a boat owner can operate."

WEST COAST ENGINE & EQUIPMENT CO.

1077 EASTSHORE HIGHWAY, BERKELEY 10, CALIFORNIA • LAndscape 5-2261



Before stretching

After stretching

Careful Ederer "stretching" pulls all knots tight, gives you 100% even mesh!

DISTRIBUTORS:

C. J. HENDRY COMPANY
San Pedro, California
San Diego, California
San Francisco, California

THE BEEBE COMPANY
Portland, Oregon
Astoria, Oregon

SUNDE and D'EVERS CO.
Seattle, Washington
Ketchikan, Alaska

There's one way to get your money's worth out of fish netting. That's to check the *extra work* that goes into making the net. Take Ederer's famous "stretching" operation pictured above. This added step makes sure that all knots are pulled tight, so there's no slipping or sawing. It takes experienced hands to give just the right amount of "stretch". But the extra care is worth it. The result is 100% uniform mesh. More important, it means you get the finest, longest wearing net in the world.

Along with Ederer's famous Double Inspection and Tensile Strength Tests . . . this Stretching Care is given to all Ederer Nets, *regardless of size or type.*

So make your next order an Ederer Net. And enjoy more profit per pound for many, many seasons.

EDERER Netting
Since 1881

EDERER Division
THE LINEN THREAD COMPANY, INC.
540 North Orleans Street, Chicago 10, Illinois

. . . facing facts

TODAY, two jobs face the canned salmon industry. Salmon runs must be rehabilitated. Production costs must be reduced.

To do this, sound fishing regulations must be carefully worked out to the best interests of the **entire** industry. Expensive duplication of effort and equipment must be eliminated.

As always, Pacific American Fisheries stands ready to meet the challenge of the day, and to assume its share of leadership and responsibility in solving these major problems. Working together, we can return our industry to its rightful status—a profitable operation with a sound future.

The fact remains that canned salmon has always been a great economy food. Today, the industry must "face facts"—and work to keep it so.

PACIFIC AMERICAN FISHERIES, Inc.

BELLINGHAM, WASHINGTON

Quality Always

Sales Subsidiary: DEMING & GOULD COMPANY, South Bellingham

How to keep a fleet fishing

New England Fish Co., of Seattle, counts on CAT power*

THE *AL·H*, which was commissioned last spring, is a typical member of the big fleet operated by the New England Fish Co. An Alaska limit seiner, built by Sagstad Co., of Seattle, Washington, the *AL·H* is powered by a Caterpillar D17000 Marine Diesel, delivering 150 continuous HP to the 47 x 42 propeller. She's a combination tender, salmon seiner and dragger and her average catch runs about 10,000 pounds of fish.

In all, there are 14 Cat Engines in the company's boats, making the fleet approximately 90 per cent Caterpillar-powered.

Successful fishermen agree that dependable engines have a lot to do with profits. You can't make money tied up in port for engine repairs, or drifting while the crew tinkers with the power plant. More and more boats are installing Caterpillar Diesels because owners have found they can depend on these rugged engines to run for months and years with almost no attention.

Your Caterpillar Dealer offers a range of engines in 11 sizes, up to 450 HP—all *honest* horsepower, rated for continuous 24-hour duty. And he contributes to their long work life with reliable dockside service and genuine parts. Talk over your power problems with him today.

Caterpillar Tractor Co., San Leandro, Cal.; Peoria, Ill., U.S.A.

CATERPILLAR*

*Both Cat and Caterpillar are registered trademarks—®

MODERN MARINE POWER

PMS
Since 1897

Pacific Marine Supply Co.

Quality Merchandise and Genuine Service

1213-1223 WESTERN AVE., SEATTLE 1, WASH.

A Christmas Message

All through the year we use this space to tell you what we have to sell.

Now, at Christmas, we simply want to thank all of you with whom we have done business during the past year.

For all of us at Pacific Marine Supply Co., may we express the earnest hope that your Christmas will be a most happy one, and that the coming year will bring you and yours a fair share of the good things of life.

Sincerely,

PACIFIC MARINE SUPPLY CO.

E. Cunningham

E. Cunningham, President

R. D. Ladd

R. D. Ladd, Vice President and General Manager

PACIFIC FISHERMAN DECEMBER 1954

Theirs The Plan—Members of the International North Pacific Fisheries Commission's Committee on Biology and Research. The Canadian group stands in the left rear: Dr. A. W. H. Needler, Dr. R. E. Foerster, and James Cameron, commissioner; followed by the Americas: Dr. L. A. Walford, Dr. W. F. Thompson, and Edward W. Allen, commissioner and general chairman of the committee. Dr. Motosaku Fujinaga, chief of the Japanese scientists, stands in the middle of that group, with Yasumatsu Miyake on the left and Koichiro Kobayashi, commissioner.

Pacific Salmon Research Emerges On An Oceanic Scale

• Research on an oceanic scale emerged from the late October meeting of the International North Pacific Fisheries Commission in Vancouver, B. C.

The scientific program adopted calls for biological studies ranging across the full width of the North Pacific, participated in by the United States, Japan and Canada, and all designed to solve the problems raised by the Protocol of the treaty. There the commission is charged:

"As expeditiously as practicable, investigate the waters of the convention area to determine if there are areas in which salmon originating in the rivers of Canada and of the United States intermingle with salmon originating in the waters of Asia".

Success of the research will bring-up the second charge of the Protocol:

"If such areas are found the commission shall conduct suitable studies to determine a line or lines which best divide salmon of Asiatic origin and salmon of Canadian and United States origin."

Never in history has so broad a program of biological research been effectuated; and particularly by three nations, each operating independently, but in close coordination and in accord with a plan developed in the joint deliberations of scientists and commissioners of the three countries.

• *THE FRUIT OF STUDY*—The Program of Research on Problems Raised by the Protocol—that's the official name of the document—grew out of many days of preliminary discussion in Washington last spring; again in Tokyo in May; and finally for a week in Vancouver immediately prior to the general meeting of the commission.

The program, then, is the work of these men:

United States—Edward W. Allen, commissioner, and general chairman of the Committee on Biology and Research; Dr. W. F. Thompson, director, Fisheries Research Institute;

Japan's Spokesmen—Iwao Fujita, on the left, was chosen chairman of the International North Pacific Fisheries Commission for 1954-5. With him is Koichiro Kobayashi, president of Nichiro Gyogyo Kaisha, Ltd., and his fellow commissioner.

Dr. L. A. Walford, chief of fisheries biology, United States Fish and Wildlife Service.

Canada—James Cameron, commissioner; Dr. A. W. H. Needler, Dr. R. E. Foerster, and Dr. J. L. Hart, all of the Fisheries Research Board of Canada.

Japan — K. Kobayashi, commissioner; Dr. M. Fujinaga and Y. Miyake.

● *FOUR-FOLD APPROACH*—The problems of the protocol will be attacked from four distinct avenues.

First of these is a study of the oceanic distribution of the salmon populations of the North Pacific. It will involve exhaustive study of the data developed by the Japanese offshore fishery. In addition, it will involve special fishing by research vessels to determine how and where to catch salmon on the high seas for study. The Japanese will have two vessels engaged in this work; and the United States from two to five. Canada is not expected to participate actively in this phase. Scientific observers will be exchanged between the national groups.

Second attack will be the physiological one, in which the body measurements and structures are studied in an effort to determine if there are consistent differences between the two continental stocks. This work will involve studies of scales, blood chemistry, and related organisms.

This study is complicated by the fact that the scientists will not have samples from *known* streams on the Asian side, as these of importance are virtually all within the soviet sphere.

Third phase of the work is tagging, to which Japan and the United States will each devote several vessels. Canada will participate to the extent of seeking means of tagging immature seaward migrants.

The tagging task is recognized as a tremendous one, especially because of the difficulty of catching fish on the high seas on sufficiently viable conditions to yield informative returns. The Japanese have tagged fish in recent years, but the returns have been only about 1/10 of 1%, and all recoveries were made in the high seas fishery itself.

Tagging studies are under serious handicap because of the fact that stream recoveries cannot be expected from Asian rivers; while recoveries from the streams of the Aleutian Islands presents a difficult task.

Fourth approach is through the medium of oceanographic science, in which all three nations will participate actively, collecting and studying data on currents, their drifts and eddies; plankton and food centers; water temperature, color and transparency; meteorological data, wind and rain and storm and fog.

Canada's Commissioners—Stewart Bates, deputy minister of fisheries, and retiring chairman of the International Commission, is on the left, followed by James Cameron, John N. Buchanan and Roger T. Hager.

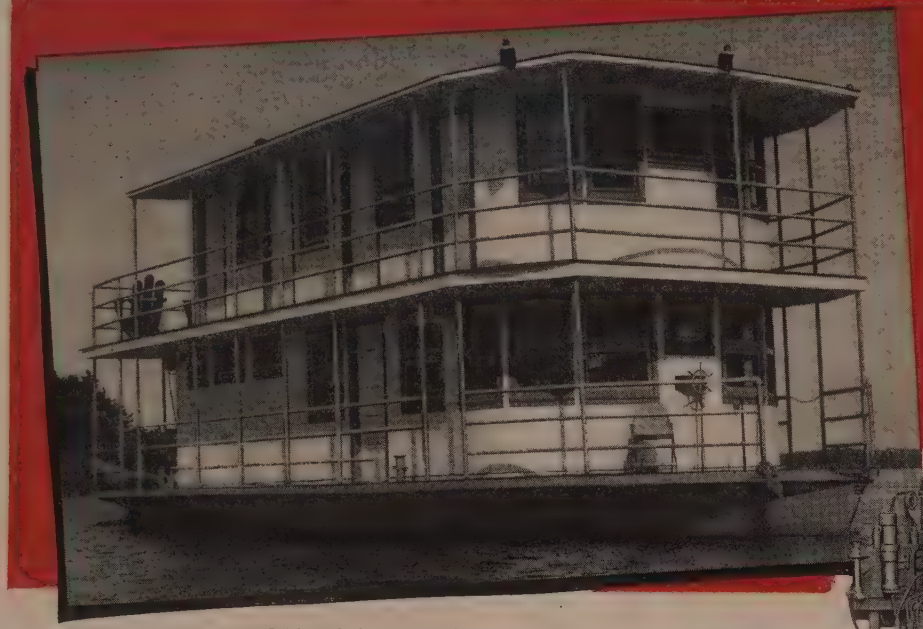
Canadian research on this line will be close to that country's coast, while Japan will have two research vessels working; and the United States two to five, in addition to data contributed by the Navy and Coast Guard.

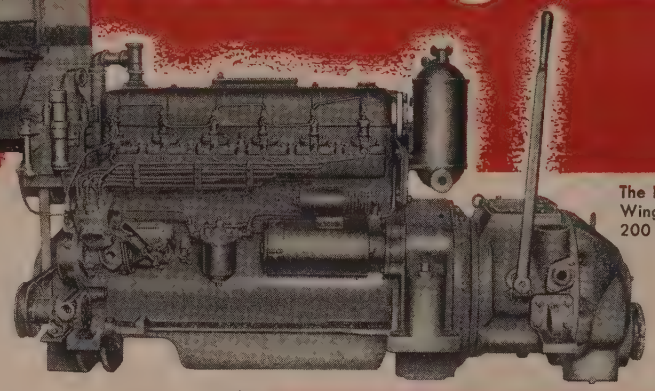
● *HOW AND WHO?*—Obviously, a program of this sort will involve large expense. Each national section of the commission will provide for the work it has underwritten from its own resources.

In the case of the United States, John L. Farley, American commissioner and director of the Fish and

The American Section—Milton E. Brooding, chairman of the American section, is on the left, followed by Edward W. Allen, Governor B. Frank Heintzleman of Alaska and John L. Farley, director of the Fish and Wildlife Service.

Red Wing DIESEL powers a floating hotel!





The D-6-100 is one of many Red Wing diesels, from 45 H.P. to 200 H.P.

50 GOLDEN YEARS OF SERVICE ON THE WORLD'S WATERWAYS — Red Wing Marine

Pride of the fleet of Jacob L. Pete of Pete's Cabin Boats on Basswood Lake on the Minnesota-Ontario border is the gigantic new Gloria Mae—a luxurious "floating hotel" that has all the comforts of a mansion. The Gloria Mae is powered with a Red Wing Diesel model D-6-100!

Says Jake Pete: "Up here in this rough border country an engine has to "take it" . . . maintenance is rough . . . there are no roads into the lake and everything must be hauled seven miles by water, and portaged another four miles on a rough trail. That is why we picked the Red Wing Diesel. I know from experience that Red Wing engines deliver the utmost in rugged performance, safety and low maintenance cost."

Yes, you can take it from Jake Pete, and many other owners—Red Wing engines, both gasoline and diesel, deliver safe, dependable power for all types of boats, both work and pleasure. There is a full line of diesel and gasoline Red Wing engines for every purpose—it will pay you to investigate the profit and pleasure performance of this line which has led the field for half a century!

Red Wing Marine

DIV., RED WING MOTOR AND MANUFACTURING COMPANY,
Red Wing, Minnesota, U.S.A.

"Go Places with Red Wing"
MAIL TODAY!

RED WING MARINE
1000 Levee Street, Red Wing, Minn.

Please send me all the information on Red Wing diesels.

Name:_____

Address:_____

Type of Boat:_____ Size of Boat:_____

Number of Boats Operated:_____

Commissioners and Advisors—Three of the American commissioners with the attending members of their official advisory committee at the International North Pacific Fisheries Commission meeting. At the table, from the left: Donald P. Loker; C. L. Anderson; Edward W. Allen, Milton E. Brooding and John L. Farley, commissioners; George Johansen; Miller Freeman. Standing, from the left: Robert J. Schoettler, Lowell A. Wakefield, M. T. Hoy, Robert Kallenberg, Larry Fitzpatrick, Richard S. Croker, and W. C. Arnold. Governor Heintzleman, commissioner, was not present at the time.

Wildlife Service, was able to announce that Secretary of the Interior McKay has approved use of Saltonstall Funds to get the scientific work started immediately. It is generally understood that this is a temporary measure only, and that the commission—with the aid and support of the industry—will need to ask Congress for specific appropriations for the work in future years.

Much of the work will be done by the Fish and Wildlife Service at the request and under the direction of the American section. Some portions will be contracted to other agencies, notably the Fisheries Research Institute, to which the tagging phase of the study has already been assigned.

● *NEED FOR ACTION*—Problems raised by the Protocol to the Treaty are given primacy in the commission's researches because there is no time limit on the durability of the provisional abstention line at 175 degrees West Longitude.

The treaty direct the Commission, "as expeditiously as practicable," to determine the line or lines which best divide American and Asiatic stocks of salmon. In the meantime, the 175 degree meridian was agreed upon temporarily; but *this agreement covers no specific period.*

The Annex to the treaty provides that the line of fishes originally accepted for abstention is not subject to change for a period of five years—but this does not pertain to the provisional division line.

In fact, the Treaty provides that if the Commission "within a reasonable time" fails to recommend unanimously dividing line or lines the matter must be referred to an international committee of scientists for determination.

These considerations, then, led the Commission to give precedence to the problems of the Protocol over those of the Annex, which are related essentially to qualifications of fisheries for abstention.

● *KING CRAB STUDY*—The commission also accepted the report of its biological and research committee calling for scientific study of the King crab population in convention waters, notably in the eastern portion of the Bering Sea.

This study, which will be initiated within the next few months, will involve collection and analysis of the catch and physical conditions under which it is made; the species composition of the catch, sex ratio and the percentage maturity and condition.

Studies will seek means of identifying separate stocks; of tagging; of distribution and dispersal of young; of growth rates and age determination; of movement of adult crabs by tagging studies; and of mortalities due to fishing and natural circumstances.

● *OFFICERS ROTATE*—Following a definite plan, Stewart Bates of Canada retired as chairman of the commission and became secretary; Iwao Fujita of Japan became chairman of the commission for the year 1954-55; and Edward W. Allen of the United States became vice chairman.

James Cameron of Canada succeeded Mr. Allen as chairman of the biological and research committee; and Mr. Farley of the United States remained as chairman of the committee on finance and administration.

The next meeting of the commission will be held in Japan at the end of October, 1955.

Milton W. James, who has been acting executive director of the commission for some months, expressed a desire to be relieved, and asked that he be not considered for the position on a permanent basis. He agreed, however, to retain the post temporarily; and so far as could be ascertained the commission adjourned without taking action to place its secretariat on a permanent basis.

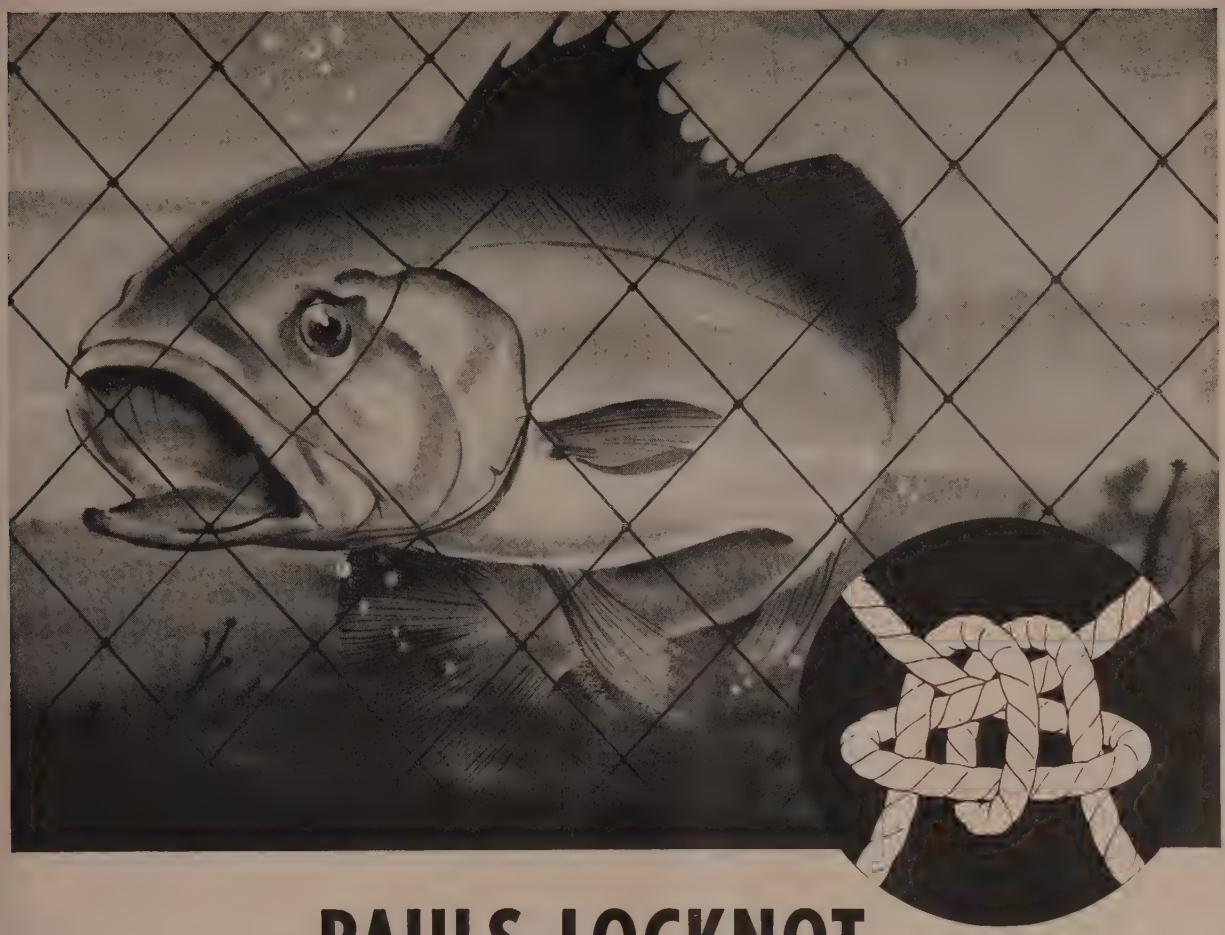
● *PROGRESS IN CONCORD* — As marked progress was made by the commission toward its primary present objective under the protocol, so the commission meeting saw significant progress from the standpoint of concord and cooperation, as contrasted with the initial meeting in Washington.

This was true not only between the national sections, but also between the American section and its advisory group.

The plenary sessions saw the national sections moving on a much franker basis than was the case at the initial meeting, and with a degree of confidence doubtless developed by acquaintance and mutual respect. The commission showed willingness to admit the advisors to plenary sessions generally, and to limit the *in camera* sessions to the barest minimum.

The American section met regularly with its advisory group and sought its view on developing questions.

● *THE ROLL CALL*—The full American section was present at the commission meeting: Milton E. Brooding, chairman; Mr. Allen, Mr. Farley; and Governor B. Frank Heintzleman of Alaska. Consultants of the American section included W. C. Herring of the Department of State; Arnie J. Suo-



PAULS LOCKNOT gills powerful 70-pound seabass

(with light nylon salmon netting knit 5½" mesh)

It was a terrific fight. But Pauls Locknot Netting won. A catch like this proves one thing. When you gill a 70-pound seabass on 5½" mesh, you know you've got a mighty *unusual* knot.

And it's true. Pauls famous Locknot completely eliminates sawing and slipping where strain is greatest. In Pauls Netting *every strand in every mesh has strength.* It means that you keep 98 out of every 100 fish gilled. You'll use Pauls Locknot primarily for salmon gill netting. But Pauls is easily adapted to shad and seabass, too. So for a bigger, more profitable year, make your next order Pauls Locknot Netting.

PAULS

FISH NET DIVISION
THE LINEN THREAD COMPANY
357 West Ohio Street • Chicago, Illinois

PAULS netting is sold on the coast by these reputable distributors

Nordby Supply Co.
1300 Western Avenue
Seattle, Washington

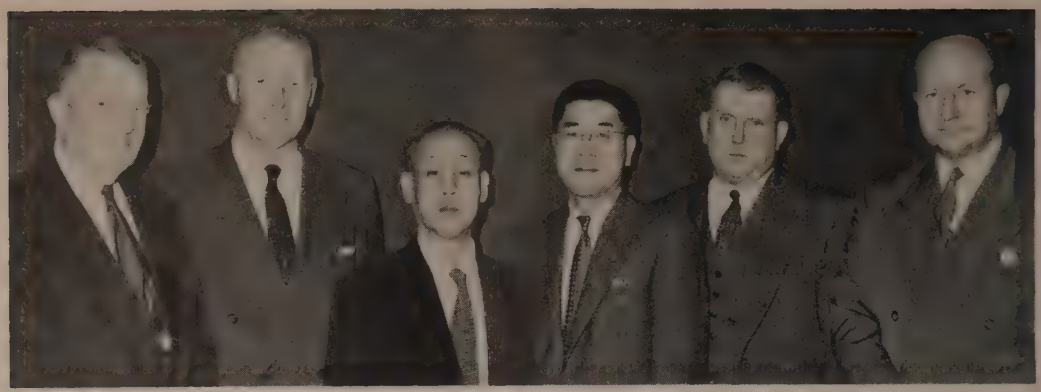
Nordby Supply Co.
Salmon Bay Terminal
Seattle, Washington

Alfred Puusti & Co.
212 Taylor Avenue
Astoria, Oregon

Horace Mercurio
223 Alvarado Street
Monterey, California

Frank J. Cardinalli
Pittsburgh, California

© P 1954



Administration and Finance are the responsibilities of this standing committee of the International North Pacific Fisheries Committee. From the left. Montgomery Phister and John L. Farley of the United States; Iwao Fujita and Shigeru Hirota of Japan; A. J. Whitmore and Roger T. Hager of Canada.

mela, Dr. L. A. Walford, Clinton E. Atkinson, William M. Terry, Takashi Miahara, Lorry Nakatsu of the Fish and Wildlife Service; Dr. W. F. Thompson of the Fisheries Research Institute, and Montgomery Phister.

Advisory committee members in attendance were: C. L. Anderson, Robert Kallenberg and Larry Fitzpatrick, Alaska; W. C. Arnold, Alaska Salmon Industry; Richard S. Croker, California Bureau of Marine Fisheries; Miller Freeman, president, *Pacific Fisherman;* M. T. Hoy, Oregon fisheries director; George Johansen, Alaska Fishermen's Union; Donald P. Loker, president, California Fish Canners Association; Robert J. Schoettler, Washington director of fisheries; Lowell A. Wakefield, Seattle; James Waugh, president, Cannery Workers Union of the Pacific.

Canadian section included Stewart Bates, deputy minister of fisheries, chairman; John M. Buchanan, president, British Columbia Packers, Ltd.; James Cameron, Pender Harbor, B. C., and Roger T. Hager, president, The Canadian Fishing Co.

Advisors of the Canadian section were: Dr. A. W. H. Needler, Dr. R. E. Foerster, Dr. Ferris Neave, Dr. W. E. Ricker, and Dr. J. L. Kask, all of the Fisheries Research Board of Canada; A. J. Whitmore and Frank Warne, Canadian Department of Fisheries.

Japanese commissioners in attendance were: Iwao Fujita, vice chairman, Japan Fisheries Association, and chairman, Japan Whaling Association; chairman; Koichiro Kobayashi, president, Nichiro Fishing Co.

Advisors of the Japanese section were: Dr. Motosakuo Fujinaga; Kenzo Kawakami, and Wataru Miyakawa, Ministry of Foreign Affairs; Yasumatsu Miyake, Fisheries Agency; Kisaburo Taguchi, Nichiro Fishing Co.; Shigeru Hirota, and Yutaka Nomura, Consulate of Japan, Vancouver.

Concordant Conservation

● Concord in conservation and the rich rewards of amicable international stewardship over the living wealth of the sea found earnest voice in two tongues as the International North Pacific Fisheries Commission met in Vancouver, B.C., last month to energize a scientific research enterprise broad as the Pacific itself.

Japanese, Canadians and Americans spoke of these things to an extent which cannot be fully reported here. Out of the numerous expressions, one stands out in thought and word; and because it was spoken by a cabinet minister of a great power, Hon. James Sinclair, Minister of Fisheries of Canada.

We quote him here — condensed, but in his own words — the measured, meaningful words of a responsible minister, speaking for his government before the world:

● There is not much point in one nation carefully conserving the fisheries resources within its own territorial waters, if just outside these waters other nations can come and ruthlessly exploit these fishery stocks. On the other hand, the doctrine of the freedom of the seas does give every nation the right to fish on international waters, so the problem is a difficult one. Some nations have tried to solve it by extending arbitrarily their own territorial waters further out from the accepted three-mile limit, to 50 or 100 miles, or to the edge of the continental shelf. Such actions bring immediate protests and reprisals from the nations which over the years have established historic rights by fishing these areas. Cases have been taken to the World Court by some nations, while others retaliated by trade embargoes. Unilateral action such as this is clearly not the way to protect the fisheries and build international good will. . . .

There is another approach to conservation on the high seas—by international treaty—a method first developed in the North Pacific. . . .

Nothing succeeds like success—and the success of the first international fisheries treaty has led us, and many other nations of the world, to arrange other such treaties. . . .

A year ago the governments of the United States, Canada and Japan agreed to establishment of the International North Pacific Fisheries Commission, to conserve and develop the fisheries resource of the vast area of the North Pacific.

This commission, I feel, represents more than the desire of the three nations to preserve the sea resources. It represents a growing acceptance of a new concept of the world we live in. . . .

The day will come when the food resources of the sea will hold the key to man's survival. . . . The peoples of the world must therefore conserve, protect and develop these resources of the sea. . . .

When one or more countries engage in conservation measures they gradually build up the stocks of the conserved species, not only in their own territorial waters but on the adjacent high seas. . . . But is every other nation free to fish this reserve stock? . . . To meet this problem a new principle was expounded—the principle of abstention—and it is embodied in the treaty

that creates this North Pacific commission. . . .

The essence of the treaty is simple. It says that where a (coastal) fishery is under conservation by one or two nations other nations should abstain from fishing in that convention area. The abstention can be asked only under certain conditions. Before a nation can be asked to abstain it has to be shown that:

First, the particular resource is under scientific study;

Second, it is already fully exploited;

Third, it is under regulation . . . to keep it on a sustained yield basis.

This principle of abstention . . . is a practical step toward promotion of better international relations in the North Pacific area.

This treaty and this commission do not touch on the question of the limits of territorial waters. . . .

This commission has a job of major concern to the nations interested in the great fisheries of the North Pacific. No other fishery commission faces such tasks and such problems—the enormous area, the complexity of the species, the successful operation of the new abstention principle. The rewards to all the participating nations will be great if success crowns their efforts—maximum yield of the fishery resources of the ocean to all the partners.

The three governments have recognized the magnitude of this undertaking.

Where Runs Sovereignty at Sea?

Territorial Waters Problems Erupts on 3 Continents

● Problems related to territorial waters and maritime sovereignty erupted into interest and attention at several points over a hemispheric stage during the late autumn months.

In New York the United Nations Assembly took-up the questions of the territorial seas raised by its International Law Commission something like a year ago.

In Santiago, Chile, officials of Chile, Ecuador and Peru, with observers from El Salvador, Colombia, Mexico and Costa Rice in attendance, convened in an October session at which the Chilean minister of foreign affairs said:

"The right to proclaim our sovereignty over the maritime zone which extends 200 miles out from the coast is indisputable and inalienable. We are meeting now to reaffirm our determination to defend this sovereignty, whatever the consequences may be."

He was quoted later as saying that the United Nations "cannot and should not interfere in this matter".

The meeting, which is being followed this month by another in Lima, Peru, adopted seven resolutions:

1. Agreement on conditions which must be met for the issuance of licenses for fishing and whaling;

2. Establishment of legal penalties against foreign vessels carrying out unauthorized fishing operations;

3. Agreement that the three nations shall act in concert to defend the principle of their maritime sovereignty to a distance of 200 miles from their coasts.

4. Agreement on enforcement and control measures.

5. Provision for a neutral zone along the projections of the boundaries between the signatory countries.

6. Recommendation for legislation to encourage the development and protection of the fishing industry by such means as tax exemptions and extension of credit.

7. Agreement to use funds derived from fishing licenses to set-up biological and technological fishery research.

Shortly before this action was taken in South America, a conference of European nations held in Belgium saw representatives of Great Britain, France, Belgium, Holland and Western Germany declare for the universal maintenance of the three-mile limit for territorial waters.

● *CANADA'S POLICY* — In Canada, at the end of October, Dr. Stewart Bates, deputy minister of fisheries, in a formal address said Canada would seek co-operation of foreign fishermen rather than extend territorial waters to protect the nation's offshore fish resources.

Dr. Bates said that revolutionary changes in fishing technique and gear during the past few years had made the question of territorial waters "one of the most vexing" of international problems.

Canada still claims only three miles offshore as territorial limits for her 57,000 miles of coastline, and foreign vessels are permitted to fish right up to that line. However, since fish do not recognize artificial boundaries there is always the danger that this resource, depended upon by Canada, may be jeopardized by exploitation of foreign fishermen, equipped with highly effective instruments and gear. The situation was particularly serious for Canada on the Atlantic coast.

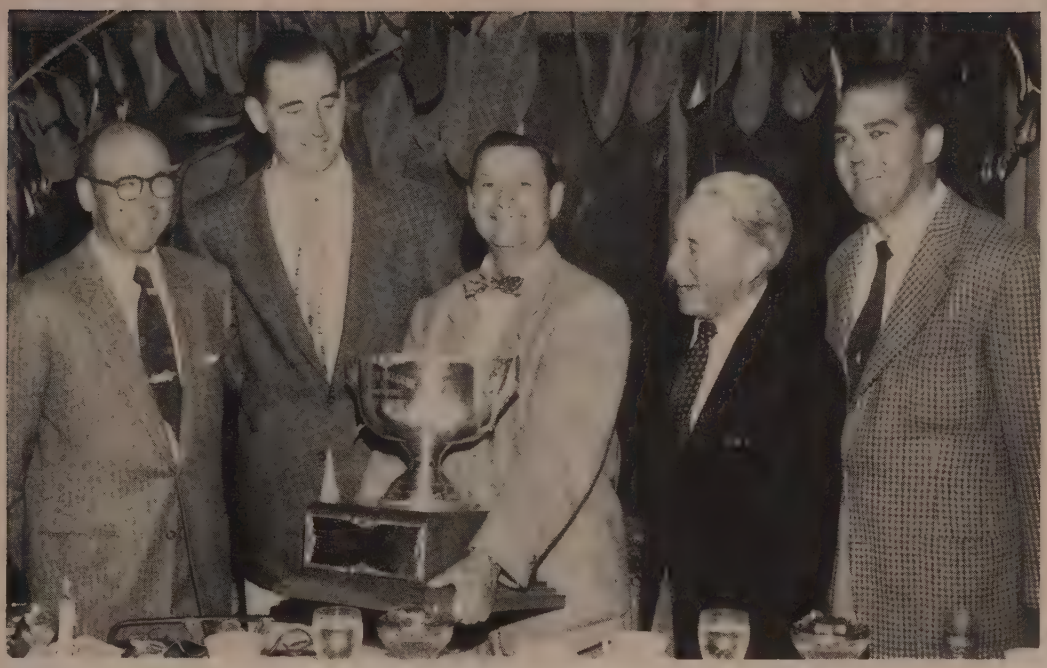
However, rather than attempt to impose arbitrary limits through extension of territorial waters, Canada hopes to obtain the friendly co-operation of the nations concerned, said Dr. Bates.

Spokesmen of the California tuna industry, naturally keenly interested in the resolutions passed by the South American republic, said: "We shall certainly go along with them in any effort to study tuna biology and protect the tuna population against depletion. The Inter-American Tropical Tuna Commission is already working along these lines and we shall be glad indeed to see Chile, Peru and Ecuador participating in scientific research in tuna biology through this commission, or other competent agency".

Request that the United States institute a case before the World Court to obtain a decision as to the rights of American fishing vessels, and of nations to assert jurisdiction beyond the commonly accepted limits of the high seas is filed with Secretary of State Dulles in a letter written on behalf of the American Tunaboat Association by W. Wade Ambrose, its president.

It is suggested that the case be based upon the seizure of the tuna clipper *Sun Pacific,* and that it be so drawn as to afford as broad as possible a test of the questions arising from recent arrests of American vessels and the assertions of South American countries to extended seaward sovereignty.

FIBREBOARD
SERVES THE
FISHING INDUSTRY
North • East • South • West
Fibreboard offers complete research, production, and sales facilities to help you with your particular packaging problems.
(West)
Boise
Denver
Fresno
Los Angeles
Oakland
Phoenix
Portland
Sacramento
Salem
Salinas
Salt Lake City
San Diego
San Francisco
San Jose
Seattle
Stockton
Yakima
(East)
Baltimore
Chicago
Easton
Lancaster
New York
Philadelphia
Reading
SALES OFFICES.
FIBREBOARD PRODUCTS INC.
Head Office: San Francisco 11, California
FIBREBOARD PRODUCTS (EASTERN DIVISION) INC.
Philadelphia and Baltimore



THE WINNAHS—For the second year in succession, possession of the Miller Freeman perpetual golf trophy is divided between two members of the California Fish Canners Association, Jack Gorby, extreme left, and James S. DeSilva. At right are last year's "split" winners, J. R. Biven and Nick Trutanic. Center, holding the trophy is the tournament chairman, Lee Irish.

What California Fish Canners Count as Industry Gains in '54

California Fish Canners Association's annual meeting in October saw the election of Donald L. Loker, vice president of Star-Kist Foods, Inc., as president. He succeeds James S. DeSilva of South Coast Fisheries, Inc., under whose administration the association made marked advance, as reported in detail by Roy H. Beaton, executive vice president.

The new officers, including William C. Morehead, Pan-Pacific Fisheries, Inc., vice president; and Kenneth J. Berglund, Westgate California Tuna Packing Co., secretary treasurer, were installed at the annual banquet rendered by the American and Continental can companies.

Fouth annual competition for the Miller Freeman perpetular golf trophy ended, as it did last year, in a tie between two CFCA members. This time it was James S. DeSilva and Jack Gorby, who will share possession six months each for the next year.

Present included:

Joseph J. Bogdanovich, N. F. Trutanic, J. P. Tripps, Mr. Loker, Robert K. Pedersen, John Zitco and Roy Kelley, Star-Kist Inc.; Gilbert C. Van Camp Sr., Montgomery Phister and S. F. Brown, Van Camp Sea Food Co., Inc.

Our tailor-made fish-can service is where you can put your finger on it

No matter where you operate, Continental is close to you. We have nine can plants here on the Coast, four of them working most or all of their time on cans for salmon, tuna and sardines.

Obviously we're in an ideal position to give you the best in cans and deliveries. However, as our customers know, that is only the beginning of our interest in the people we deal with. Our engineering staff is also right here on the spot, readily available to help keep your filling, closing and other operations at top efficiency. Well-staffed Western research laboratories are on instant call whenever you need their special services.

Why not let us show you what our Tailor-Made Package Service can mean to you? We'll be glad to hear from you, anytime.

CONTINENTAL CAN COMPANY

1120 Wilshire Boulevard, Los Angeles 17

Russ Building, San Francisco 4

10200 No. Burgard St., Portland

Al Vignola Jr., L. T. Bradbury, West Coast Packing Corp.; Max J. Gorby, Jack Gorby, Gerald Cigliano and Mr. Morehead, Pan-Pacific Fisheries Inc.; Peter A. Kuglis, Mr. DeSilva, V. J. Evich, South Coast Fisheries, Inc.; Joe M. Mardesich, Jr., Franco-Italian Packing Corp.; Walter M. Longmoor, T. A. Thomas, Western Canners Co.; Don Saxby, California Packing Corp.; T. F. Sandoz, Columbia River Packers Association.

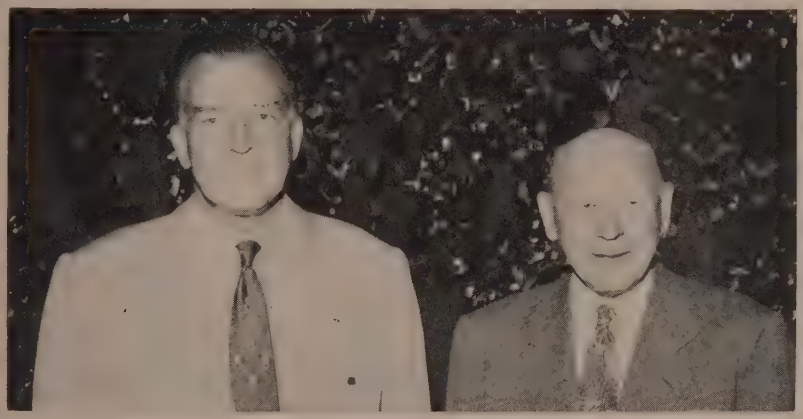
Mr. Beaton and Herbert C. Davis, CFCA; Charles C. Carry, National Canners Association; Ed L. Morris, Tuna Research Foundation.

Alexander Black, Robert Carson, Robert Turner and Mr. Hurtt, American Co.; J. P. Morgan, E. W. Norridge, A. C. Elliott, William H. Hodgson, Continental Can Co.

Joe Porter, Fiberboard Products; A. J. Finstad, Longview Fibre; J. H. Seley, Charles Hester, J. H. Seley & Co.; Cecil Bays, Carl Warbick, Arch E. Ekdale, Gordon Shallenberger, Al Shell and G. K. Breitenstein.

ADVANCE IN 1954—Among the highlights of Mr. Beaton's annual report were:

The Association's Tuna Standards industry committee almost completed its work under the able leadership of G. H. "Hoke" Clark, whose death in Peru in August was a great loss to the industry. Fortunately, Mr. Clark completed the major part of his work before his death and left such splendid records that his successor will be able to pick up where he left off. Mr. Clark left to the California Fish Canners Association his very valuable library on fisheries collected during his years of business and professional activities.



TOP OFFICERS of the California Fish Canners Association are Donald L. Laker, left, president, and William C. Moorehead, vice president.

In addition to the work of the Tuna Standards industry committee, James S. DeSilva, Jr., 1953-1954 president, appointed a Sardine Standards committee, with Dr. Sven Lassen as chairman. Considerable interest has been shown in Washington by the U.S. Food and Drug Administration in our initiation of a study of sardine standards.

An innovation this year was the formation of a special coordinating committee representing the canners at Terminal Island, San Diego and San Francisco. This committee informs the Labor Relations committee the terms and conditions of settlements reached with various unions in each port.

Perhaps the major achievement of the year has been that of the special merger committee, headed by Roland G. Swaffield, which resulted on October 1 in a merger of the California Fish Canners Association, Inc., and the Tuna Research Foundation, the latter becoming a division of the Association. The good work of the Foundation will be continued under the new plan, with a separate staff. The actual operation of both organizations will not be greatly changed because, with few exceptions, all of the California canners of tuna belong to both groups. The office equipment and staff of the Foundation are moving from Long Beach to the Ferry Building, Terminal Island, and will occupy the same office as that of the California Fish Canners.

Two Presidents — Guy V. Graham, left, newly-elected president of the Association of Pacific Fisheries, takes over the duties from Vance F. Sutter, who had served for four years. Mr. Graham is vice president of Libby, McNeill & Libby, in charge of that company's salmon operations.

VIGILANCE Is the Price of Fish

● Acceptance of a vigilant role as the only means by which the salmon industry can protect the supply of food it prepares for the American people—and thus protect its very existence—seemed to pervade the earnest annual meeting of the Association of Pacific Fisheries in Seattle November 1.

From speaker after speaker the members of the industry seemed to draw the same determination in varied spheres—

Vigilance in the safeguard of product quality—

Vigilance in opposition to fish-destroying engineering projects on salmon streams—

Vigilance in research, at sea as well as in the streams—

Vigilance to ensure that Congress provide adequately for research essential to the functioning of international conservation under treaties—

Vigilance to detect excessive exploitation—

Vigilance to prevent violations of conservation laws and regulations.

These were points touched on by near a dozen speakers—and evidently taken to heart by a large and interested attendance.

● *GRAHAM ELECTED* — One aspect of the meeting which cannot be considered related to vigilance was the annual election.

Guy V. Graham, vice president of Libby, McNeill & Libby, in charge of salmon operations, was chosen president of the association. In this office he succeeded Vance F. Sutter, president of the Fidalgo Island Packing Co., who had served as chief officer of the association for four years.

Four vice presidents were elected in this order: C. F. Johnson, Port Ashton Packing Co.; A. W. Brindle, Wards Cove Packing Co.; T. F. Sandoz, Columbia River Packers Association, Inc.; A. R. Barthold, Alaska Packers Association. Dr. E. D. Clark was re-elected secretary-treasurer.

Elected to the board of trustees were: August Buschmann; S. M. Rosenberg, New England Fish Co.; Lawrence Calvert, San Juan Fishing & Packing Co.; A. W. Brindle; Charles D. Alhadeff, Whiz Fish Products Co.; E. E. Murray, Bristol Bay Packing Co. All were re-elected save Mr. Rosenberg, who succeeded Harald Synnestvedt; and Mr. Alhadeff, who succeeded Daniel Campbell.

By formal resolution the association expressed its sorrow at the passing of J. W. Ashley, F. L. Daly, P. H. McCue, E. F. Medley, George B. Kelez, Richard Shuman and Lawrence M. Kolloen.

● 1954 *QUALITY* — The past season's pack was considerably better in average quality than that of 1953, Walter Yonker, inspecting chemist of the National Canners Association Northwest Branch laboratory told the packers.

Among suggestions and observations which he made with respect to packing and handling procedure were:

Salting should be watched closely. It is the commonest single fault, with chemical tests showing salt content may range from 50% to 200% of optimum.

Some undercooking is noted—not to the degree where spoilage ensues, but where quality of the pack is impaired by hard bones.

Overcooking occasionally persists to the degree where quality of the pack is impaired.

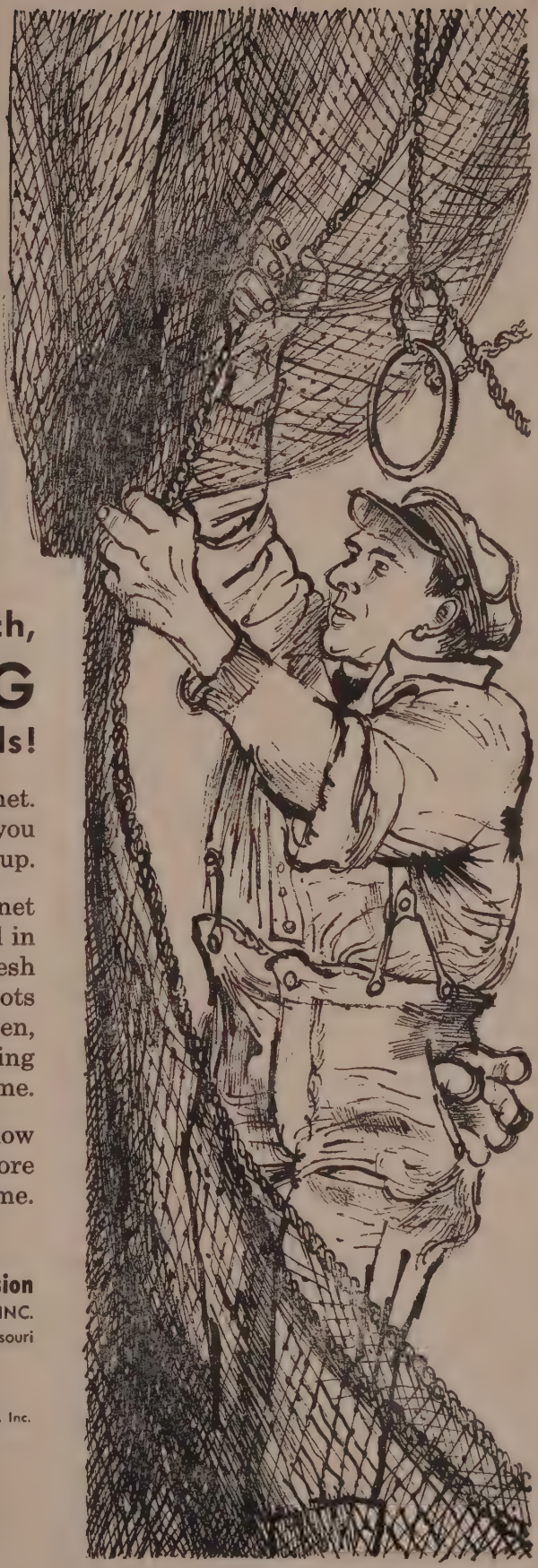
Spoilage loss was less this year than last, but should have been avoided altogether.

Codes split between shipments, and too-small code lots were cited as cause of delay inspection.

● *ACTION ON DAMS*—Grant of a permit for studies of the possible use of the Copper River for hydroelectric purposes, with a high dam and 70-mile lake, was brought forcefully to the attention of the industry by Guy P. Halferty, who declared "Dams are sneaking upon Alaska. This is not a problem for us of the Copper River alone. It is a threat to the entire industry, and a problem for us all."

T. F. Sandoz accused the Alaska industry of lethargy and disinterest while a bitter fight had been fought on the Columbia River, saying: "I warn you to be awake, and aware to the dangers of today and tomorrow. We believe we have established the point that dams must provide as fully as possible for the passage of fish; but dams are not the only danger to the salmon. It is the cumulative effect of 'development' which is utterly destructive.

The Association took up this charge to be vigilant with the passage of a resolution which cited the destructive effect which dams have already had upon the salmon resource; the fact that thus far transportation of salmon migrants past dams has been at the cost of high mortality; that the



catch after catch,

ADAMS NETTING

gives you bigger payloads!

It's easy to write a lot of praise about a net. But only after hundreds of peak loads do you really know how well your net is holding up.

Adams takes the guesswork out of net buying. With Adams Best, every strand in every mesh has strength. And each mesh is 100% uniform in size and shape. All knots are carefully inspected for tightness. Then, too, before your order is shipped, the netting is carefully inspected... for the second time.

So with Adams Best Netting you know for sure that you'll be getting peak, more profitable loads for a long, long time.

ADAMS Nets • Twine ADAMS' BEST

Adams Net and Twine Division
THE LINEN THREAD COMPANY, INC.
701 North 2nd Street, St. Louis, Missouri

Distributors:

Seattle Marine & Fishing Supply Co.
Seattle, Washington

A. D'Acquisto & Sons
Monterey, California

Seaside Supply Stores, Inc.
San Pedro, California

Coast Equipment Co.
San Diego, California

Englund Marine Supply Co.
Astoria, Oregon also located at Newport, Oregon

BALL CARRIERS—While John L. Farley does the quarterbacking, these three are the men who carry the ball in Alaska fishery administration. Arnie J. Suomela, on the left, is assistant director of the Service; Clarence Olsen, special administrator for Alaska, center; and Seton Thompson, chief of the Alaska Branch of the Service.

pools created destroy natural reproductive and rearing conditions; and the need of the salmon resource as a protein food supply.

The Association then protested construction of dams on salmon streams, and the issuance of preliminary permits by the Federal Power Commission, unless such dams be vital to the national defense of our country, including its territories."

● *OCEANIC RESEARCH*—Oceanic research problem undertaken by the International North Pacific Fisheries Commission was discussed before the packers by Dr. W. F. Thompson, director of the Fisheries Research Institute, and a member of the three-nation committee which shaped the program. Going into its details, which are discussed elsewhere in this issue, he said: "This is a far-reaching attack on the great gap in our salmon knowledge—the oceanic life phase".

He warned the industry, however, against complaisance and urged it to maintain its independent position and sharp attention to the need of continued study and research in the coastal and freshwater aspects of the salmon's life history.

John L. Farley, director of the Fish and Wildlife Service, and a member of the Tripartite commission, urged the packers to heed Dr. Thompson's call to vigilance and against self-assurance. He said that the research agencies available to the American section were uniting their forces and pooling their intelligence—and he urged that the industry similarly unite in support and backing before Congress to provide funds adequate for the continuance of the Tripartite researches.

Another member of the commission, Edward W. Allen, supplemented this position as he introduced the members of the Japanese section, Iwao Fujita and K. Kobayashi, who attended the association meeting. "Science is the basis of success in fishery maintenance", Mr. Allen emphasized, adding: "We know that fish play an important part in our international relationships".

Clinton W. Atkinson, chief of Pacific salmon investigations for the Fish and Wildlife Service, assisted by Frank Fukuhara, told of the Service's studies of the mid-ocean fishery by means of the *John N. Cobb* and Mr. Fukukhara's two seasons as an observer aboard vessels of the Japanese fishing fleet, illustrating their discussion with colored slides of operations.

● *CANADIAN METHODS*—These were discussed for the packers by A. J. Whitmore, chief fishery inspector for the Canadian department of fisheries in British Columbia, who emphasized that the department has ready and effective authority to control intensity of fishing, and even to close operations in order to protect the quality of the product.

● *SOCKEYE PRINCIPLES* — Principles whose application produced the great Sockeye run of 1954, climaxing four years—a full Fraser cycle—in which each run set a post-Hell's Gate record for its cycle, were discussed by Roy Jackson, assistant director of the Sockeye Commission staff. He credited Miller Freeman, A. L. Hager, Edward W. Allen and Dr. W. F. Thompson with establishing principles which have proven of the utmost value, and mentioned in particular Dr. Thompson's demonstration of the part which Hell's Gate had played in bringing depletion on the Fraser; and how the fishways there had "proven a success beyond any shadow of doubt —a monument to biology.

In a paper which later will be published in this journal in detail, Mr. Jackson condensed the three primary principles guiding the Sockeye restoration as these:

1. Each race is a separate problem, with characteristics directly related to the environment in which it spawns and the young are reared.

2. Peak escapement must come from the peak of the run, for only the main part of the migration is properly timed for most productive results.

3. Equal fishing pressure must be exerted on each cycle year of each race—this because of the phenomenon of "dominance", whose actual cause is still shrouded in mystery through which indications point to influences in the freshwater phase of the Sockeyes' existence.

● *HOST TRADITIONS* — Although the one-day meeting substituted for the annual convention of the Association of Pacific Fisheries, a number of traditional features were preserved.

At luncheon the Pacific Marine Supply Co. and its associates, The Linen Thread Co., Plymouth Cordage Co. and E. H. Edwards Co., were hosts.

Dinner hosts were the American Can Co., Continental Can Co. and Alaska Steamship Co.

With no golf tournament, "door prizes" were awarded, winners and donors being:

Fred Scheel, a wrist watch from National Bank of Commerce; *C. J. Sebastian,* an electric blanket from Seattle Marine & Fishing Supply Co.; *Don Cooper,* clock from Seattle First National Bank; L. A. Petersen, barometer from Plymouth Cordage Co.; *S. G. Tarrant,* radio from Standard Oil Co.; *Harry Beard,* vacuum bottle set from Nordby Supply Co.; *Oscar Larson,* barometer from E. H. Edwards Co.; *Jack Wolf,* travelling bag from The Linen Thread Co.; *Denis Ryan,* binoculars from Pacific Marine Supply Co.; *Steig Osman,* clock radio from Fibreboard Products, Inc.

The affiliated industries sent a number of familiar figures, some from considerable distances. Larry Southwick, assistant sales manager of Plymouth Cordage Co., was out from Massachusetts. The Linen Thread Co. was represented by Theodore Dahlstrom, sales manager, who came out from New York, while John E. Richardson, Pacific Coast manager, came up from San Francisco. Another visitor from the South was Troy Carey of Fibreboard Products, Inc., now at the company's San Francisco headquarters after being for many years Pacific Northwest sales manager. He was attending his 27th consecutive annual meeting of the Association of Pacific Fisheries.

PACIFIC Fisherman's NEWS

DECEMBER 1954

Stepped-up Fishery Research To Follow "Shock Treatment"

Effective Voice—Robert Kallenberg, Dillingham fisherman, presented the position of resident Bristol Bay fishermen on Alaska fishery regulations for 1955 with force and conviction.

• Moving from his two-year "shock treatment" program, announced a year before as emergency treatment for the sick fisheries of Bristol Bay, Prince William Sound and Southeast Alaska, John L. Farley, director of the U.S. Fish and Wildlife Service, this winter is initiating a longer-range attack aimed at fundamentals.

Reactivated and re-energized research is the basis on which the new plans are based.

While research seeks *what* to do, and *how* to do it, the Service will undertake a revision of the antique White Act governing the Alaska fisheries designed to make it effective as a means by which the salmon resource can be rehabilitated without destroying the industry and the Territory which it supports.

Mr. Farley's initial announcement for stepped-up scientific research mentioned two primary objectives:

1. A study throughout Alaska of the factors governing ocean mortality of the salmon;

2. A resumption of scientific research on the Red salmon fishery of Bristol Bay, studies which were shelved some years ago by the previous administration.

CONTINUED
On Second Page Following

SPOKESMAN for the Southeast Alaska Seine Boat Owners Association is Joseph Krause, its president. He told FAWS officials that the seiners want the Pink salmon fishery managed in such a way as to get the escapement from the productive fish which make-up the peak of the run.

Bonito Boat Sinks

The *Guiseppi Padre* sank off San Geronomo Island, Baja, California, Oct. 31. The skipper and one crewman were taken aboard the fishing boat *New Home* shortly after the May Day signal was given.

At the time of sinking the boat had about 10 tons of bonito aboard. Skipper-owner is Alfred Silva. Clarence McNeill was the crew.

Monterey Condensing Plant Shipped to Florida

Western Processors Inc., stickwater plant on Monterey's Cannery Row is being dismantled and will go to Florida for use in the menhaden industry.

Harry McGinnis, sales representative and public relations man for Mayport Fisheries, Fernandina, Fla., is supervising the dismantling and shipping job.

B. C. Winter Herring Contract is Renewed

B. C. Fishermen and Allied Workers' Union has renewed a herring price agreement with operators of British Columbia coast fisheries.

The agreement provides for payment of $11.25 to fishermen and tendermen for each ton of herring slated for reduction, and $15.42 a ton for canned herring.

"Queen Mary" Lands Big Trip Despite Accident

Queen Mary, fishing for Westgate-California, after a checkup at Panama for damage after a grounding at the Galapagos Islands, returned to the fishing grounds and delivered 400 tons of tuna after a trip of about 100 days.

Sardine Truckings Rise

Total receipts of sardines at Monterey, trucked in from Port Hueneme and Santa Barbara, were 6,711 tons at October's end as compared to 58 tons to the same date last year.

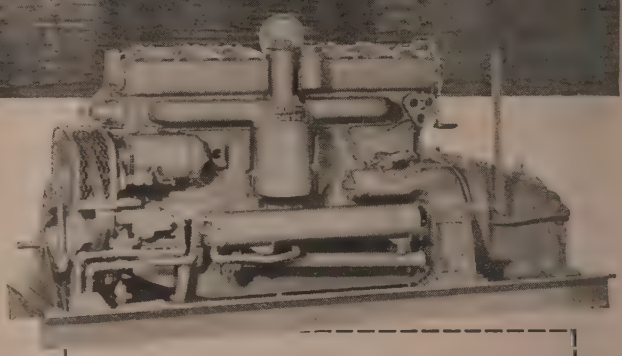
Five canneries in the area were open and working and two more were scheduled to open last month. Twenty-two Monterey purse seiners are fishing in southern California waters.

MURPHY DIESEL...

Seaworthy power for the "Seaworthy!"

• The description "seaworthy power" covers a lot of ground but it's one of the best descriptions there is for Murphy Diesel Power. It means rugged, dependable, responsive power with minimum fuel and oil consumption. It means long life with a minimum of maintenance. Alioto Fish Company's "Seaworthy" is a good example. This San Francisco fishing company put a 135 H.P. Murphy Diesel in the "Seaworthy" in 1945, and now, 9 years later, the engine is still giving good service.

Whether you're planning a new boat or repowering an existing one, the operating economy, dependable performance and long life of a Murphy Diesel can make a big difference in your profits. So be sure to talk to your Murphy Diesel Dealer before you decide on an engine.



Murphy Diesel Marine Propulsion Engines, 90 to 225 H.P.; Auxiliaries, 90 to 240 H.P.; Marine Type Generator Sets from 60 to 154 K.W.

MURPHY DIESEL COMPANY • 5301 W. Burnham St. • Milwaukee 14, Wisconsin

299

MURPHY DIESEL

SEE YOUR MURPHY DIESEL DEALER, TODAY—

Seattle 7, Washington
ALASKA-PACIFIC SUPPLY CO.
2412 Market Street

San Francisco 9, California
OSWALD MACHINE WORKS
2936 Hyde Street

Vancouver, B. C. Canada
NORTHERN ENGINE & EQUIPMENT COMPANY (B. C.) LTD.
155 Water Street

Move to Overhaul White Act Triggered by Set-Net Ruling

(Continued from Page 23)

● *WHITE ACT REVISION*—Decision of Judge George Folta, U.S. district judge, which held Alaska setnets to be "fixed gear" within the meaning of the White Act, and the resultant demand among Alaskans resident in the Cook Inlet and Bristol Bay regions for revision of the White Act is leading the Service into studies as to how the act may be amended and modernized in ways which will permit more effective administration of the fisheries under modern conditions of fishing competition and technology.

The Service does not expect that the White Act can be amended in time to be effective in advance of the 1955 season, and accordingly is conforming to the mandate of the Federal court and providing in the regulations that set-nets, as "fixed gear", shall be 1,800′ apart laterally.

HERRING'S FRIEND — Mrs. Myrth Sarvela of Sitka, secretary of the Northern Fishing Vessel Owners Association, Sitka, is the most vocal protester against the use of Southeast Alaska herring for reduction. She made a strong plea at the Alaska regulations hearings for a rule reserving the herring for feed and bait for halibut, King and Silver salmon.

Earnest pleas for delay in this regulation were voiced at the Seattle hearings, but the Service was inflexible in declaring that its legal advisors had held it had no option but to bring the regulations at once into conformity with the law as interpreted by the court.

(Set-netters affected failed to file a legal appeal from the Folta decision within the period fixed by the court for such action.)

By the way, it is interesting to note that Judge Folta's set-net-stretching decision actually followed precedent established by the late Judge Anthony Dimond in 1945, when he held in the case of Fisher v. Everett:

"Both fish traps and set nets are fixed gear attached to the land underlying shallow coastal waters".

● *NEW STYLE IN HEARINGS*—The Seattle hearings on 1955 Alaska regulations departed broadly from the pattern of the past. In the first place, they were conducted by the responsible officers—Mr. Farley; his assistant for fisheries, Arnie J. Suomela; and Seton Thompson, chief of the Alaska Branch of the Service.

Secondly, they were comparatively brief, for few changes were proposed by the Service, which had offered its program last year as a two-year treatment, which would apply to 1955 as well as 1954 with a minimum of changes.

Finally, industry representatives generally seemed to accept the FAWS position as reasonable in most respects.

● *"AREAS OF OPPORTUNITY"*—In announcing the longer-range program of the Service, Mr. Farley mentioned what he called "two new areas of opportunity".

One of these was International North Pacific Fisheries Commission and the avenue it opens for international cooperation in conservation on the basis of scientific study, intelligent administration, full utilization and historic participation.

The second opportunity was seen in the Saltonstall Funds, provided this year by new law, which makes available to the Service $3,000,000 annually for three years for scientific and commercial research and development. Mr. Farley felt that the share of these funds which could be applied to the problems of the Alaska fisheries would make possible substantial progress toward their rehabilitation.

● *OUT-IN-FRONT PLANNING* — An innovation in Alaska regulatory practice was announced by Mr. Farley in a stepped-up schedule designed to have much of the work on the regulations done *two* years ahead, rather than for the immediately following season.

This new approach has several objectives. It will give the industry more notice of intent, with knowledge of what to expect regulation-wise for two seasons ahead. Again, it is designed to start work immediately after one season on the regulations for the year to which it is most immediately related—the second one ahead. This is particularly important in the case of Pinks, with their two-year cycle; and in the case of districts which have a manifest two-year rhythm to their runs.

While this new time-table could not be put into operation this fall, Mr. Farley said it would be undertaken in January, when work on the 1956 regulations will be started, and that the results should be available to the industry before the 1955 season begins.

Obviously, regulations prepared two years ahead will be subject to amendment in the intervening period as necessity develops and experience indicates.

Pacific Fisherman's NEWS

December 1954 Volume 52 Number 13

DeWitt Gilbert ..... Editor
Helen McCauley ..... Associate Editor
Charles L. Shaw ..... Canadian Editor
Stuart F. Leete ..... No. Calif. Editor
A. W. Ponsford ..... Southwest Mgr.
Richard N. Crosby ..... Eastern Mgr.

A Miller Freeman Publication

Miller Freeman ..... President
Lawrence K. Smith ..... Vice President
William B. Freeman ..... Vice President
Miller Freeman, Jr. ..... Secy.-Treasurer

Publication Office
534 S. W. Third Ave., Portland, Ore.
BEacon 6348

Editorial & Advertising Offices
71 Columbia St., Seattle 4, Wash.
MAin 1626

DISTRICT OFFICES

370 Lexington Ave. ..... New York 17, N. Y.
MUrray Hill 3-9294
1791 Howard St. (Rm. 308) ... Chicago 26, Ill.
ROgers Park 4-3420
402 Pender St. West ..... Vancouver, B. C.
MArine 7287
815 Witmer St. ..... Los Angeles 17, Calif.
DUnkirk 9-1112
121 Second St. ..... San Francisco 5, Calif.
GArfield 1-5887
315 No. Avalon Blvd. ..... Wilmington, Calif.
TErminal 4-4538

CORRESPONDENTS

Ketchikan ..... Gene Brice
Icy Strait ..... Mrs. Vi Haynes
Sitka ..... Myrth B. Sarvela
Bellingham ..... Mrs. Pauline Constanti
Moss Landing ..... Mrs. Lillian B. Woodward
Grays Harbor ..... Ade Fredericksen
Astoria ..... Mrs. Elsa Auvil
Eureka ..... F. F. Flaherty

CHANGE OF ADDRESS: Please send notice of change of address to 121 Second St., San Francisco 5, Calif., as early as possible, and include both old and new addresses, plus zone number at new address.

ADVERTISING: Complete plates only should be sent to Pacific Fisherman, 235 N. W. Park Ave., Portland 9, Ore. . . . Advertising copy and cuts, instructions, all insertion orders should be sent to the Seattle office.

WONDERFUL COMBINATION

LOWEST PRICED
ECHO DEPTH SOUNDER
IN THE WORLD
$169.75

For 6V, 12V, or 32V Operation

1800 soundings per minute . . . equivalent to one sounding every 3 inches at 5 knot boat speed . . . accurate readings in less than 2 feet of water, and on up to more than 80 feet . . . bright flashing light . . . indicator only 4 inches in diameter . . . can be mounted anywhere . . . helps you spot the fishing holes—and the fish. A quality product.

K-W CORSAIR COMPASS

IDEAL FOR SMALL BOATS

OVER 17,000 IN USE

Built-in corrector system
Special red lighting
$35
Versatile mounting bracket
Half point card also available

Manufactured by WILFRID O. WHITE & SONS, INC.
BOSTON 10, MASS.

WEST COAST DISTRIBUTORS

WASHINGTON and ALASKA: PACIFIC MARINE SUPPLY CO., 1223 Western Ave., Seattle • OREGON: OREGON MARINE SUPPLY CO., 235 S. W. 1st Ave., Portland • CALIFORNIA: WEEKS-HOWE-EMERSON, 255 Mission St., San Francisco 5—ETS-HOKIN & GALVAN, 551 Mission St., San Francisco • NUTTALL-STYRIS CO., 825 Columbia St., San Diego • BRITISH COLUMBIA: EDWARD LIPSETT, LTD., 68 Water St., Vancouver.

Export Dept., 100 E. 42nd St., New York 17, N. Y.
Cable address: PHILYORK

HIGH GLOSS! HIGH QUALITY! HI-TEX

This high gloss, color-fast enamel protects against all marine elements. Applies with ease to a self-leveling, mirror-like finish.

AMPCO
A TRIPLE C PRODUCT

At your boatyard or dealer

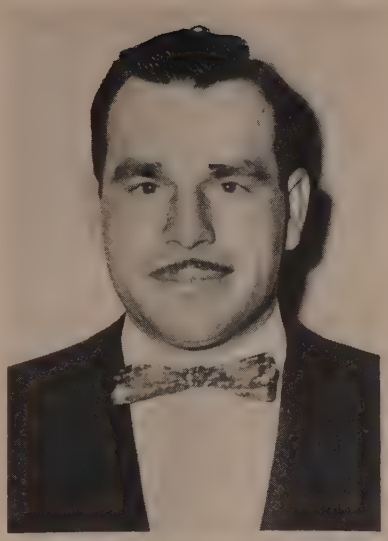
AMERICAN MARINE PAINT CO.

• *KARLUK CLOSURE* — Service proposal to impose closure on all fishing within one-mile radius of the mouth of the Karluk River produced sharp reaction. W. C. Arnold, speaking for himself rather than the A.S.I., and Old-Timer Axel Carlson of Karluk, contended against a rule which would wipe-out the living of the Karluk tribe; which has fished commercially on Karluk Spit since 1794, when they caught salmon there for Shelikof.

Depletion of the Karluk run was recognized, but the contention was well-voiced that some way must be found to conserve it without destroying the 200 Karluk Indians.

Prince William Sound fishing will be closed again in 1955.

Copper River, rated one of the bright spots in the Alaska picture, will see little change in regulation; with a run forecast slightly below that of 1954.



DRUM SEINER spokesman at the Alaska fishery regulations hearing was Capt. Dick Kink, Puget Sound drummer, who made a strong plea for this gear to be permitted in Southeast Alaska operations.

"Get Spawners from Productive Peak of Run", Fishermen Advise

• *SEEK THE PEAK* — Two positions stand-out among the many taken in the hours of argument which made-up the final hearings on the 1955 Alaska fishery regulations.

These positions were those voiced by Robert J. Kallenberg, representing the resident fishermen of Bristol Bay; and by Joseph Krause, president of the Southeast Alaska Seine Boat Owners Association.

Although their fisheries are far separated by every means of measurement, their stands were largely the same, and may be briefed thus:

It is essential that adequate spawning escapement be secured from the productive fish composing the peak of the run.

Both men in their contention referred to the findings of the Fisheries Research Institute and the International Pacific Salmon Fisheries Commission; and to the great Sockeye run to the Fraser in 1954, which was secured by taking a moderate escapement from the peak of the poor run in 1950.

Director Farley found no fault with the thesis, saying: "We are keenly interested in saving the peaks for spawning; but the problem is *how* to do it".

In his turn James B. Davis offered his solution for this problem in Southeast Alaska in two words: "Adequate sanctuary".

• *BRISTOL BAY MEDICINE* — Bob Kallenberg had an answer for this problem so far as Bristol Bay is concerned, and with particular reference to the Nushagak—an 84-hour closure specified by the regulations for the days on which history shows the Bristol Bay runs have peaked.

To compensate for this extended closure with its expected heavy escapement, he proposed that: the 84-hour closure comprise the only closed-time in that week, including the 36-hour statutory period; that no more than 60 hours closure occur in the weeks immediately preceding and following the 84-hour closure; and that in other weeks of the season only the 36-hour legal closure shall apply.

• *RED OUTLOOK DULL*—Declaring that its forecast for the Red salmon runs to Bristol Bay in 1955 promised no better than in 1954, and perhaps worse on the Nushagak, the Service announced that it again expected a "tailored" operation, and one *no greater* than in 1954.

W. C. Arnold, representing the Alaska Salmon Industry, responded that the shore operators might not be able to limit their operations to the pattern of 1954 because:

(a) Extension of set-net spacing from 300′ to 1,800′ may require a large number of floating gillnets to supply the plants;

(b) The gear curtailment required by the Service in 1954 was not met by the freezership fleet.

• *CLOSED AREA ATTACKED* — The 14-mile-wide closed area of Middle Bluff came-in for castigation all around: on the grounds that it had been persistently violated with impunity by some boats; and that it had worked against conservation by providing an excessive concentration of fishing against the Naknek-Kvichak run.

R. D. Suryan, who spoke on behalf of the freezerships, joined in the attack on this "no-man's land"; and fired a blast at the rule requiring 48 hours notice by fishing boats before moving from one area to another.

• *SOUTHEAST SORE POINT*— Principal protest from Southeast Alaska had to do with seasonal opening and closing in the West Coast areas with their notoriously late Pink runs. H. B. Friele strongly contended that cannery operations in that area under the seasonal set-up of 1954—exaggerated by early closure—had become economically impossible.

He backed his presentation by a sheaf of charts showing how the current closure, even when not advanced, cuts off a large majority of the district's run as shown by the historic production pattern.

• *SET-NET "MADHOUSE"*—Cook Inlet discussion was concerned almost solely with what-to-do about the set-net spacing rule. As said before, the Service takes the position that the Folta decision is mandatory upon it, and can be reversed only by a higher court or Congress. Although there were numerous indications that the Folta rule would be tested in the appelate courts, the setnetters' hopes seemed to rest primarily upon remedial legislation by Congress. This necessarily would involve amendment of the White Act, and it has been indicated that, once this is undertaken, the way will be opened to numerous amendments amounting to a general revision.

In his case for the Bering Sea Fishermen's Union, Mr. Kallenberg said that "closures and proposals for closures . . . justify the proposal for a thorough overhaul of the basic legislation for fisheries".

The Service's position with respect to the Cook Inlet gillnet problem is that the matter of what nets are to be eliminated in order to provide the extended spacing is a matter to be determined as equitably as possible between the setnetters themselves.

In general, this was declared "an impossibility"; and Mrs. Lottie Edelman commented as the Cook Inlet hearing closed: "It's going to be a

PETTER

DIESEL ENGINES

3-40 h.p.

WATER & AIR COOLED

Marine Auxiliary Power for:-

GENERATORS
BILGE PUMPS
AIR COMPRESSORS
REFRIGERATION
WINCHES etc.

another Petter installation

Petter AV2 driving 2 stage 30 cub. foot Air Compressor aboard Harbour Tug & Barge Co's. tow boat "SACRAMENTO" operating in the San Francisco Bay.

WEST COAST MAIN FACTORY DISTRIBUTORS

Motor Parts Machine Co.
807-815 E. Pike Street,
Seattle, Washington.

Shepherd Marine
Atlantic & Bandini Blvds.,
Los Angeles, California.

West Coast Engine & Equipt Co.
1077 Eastshore Hwy.,
Berkeley, California.

SERVICE & SPARE PARTS AVAILABLE COASTWISE

PETTER DIESEL ENGINE DIV. BRUSH ABOE INC

60-07 39th AVENUE · WOODSIDE 77 · NEW YORK

"A MEMBER OF THE BRUSH GROUP OF COMPANIES"

madhouse".

● *PENINSULA PROTEST* — Suggested 72-hour continuous closure weekly in the Alaska Peninsula district, admittedly for the purpose of passing Reds through to Bristol Bay, brought heated objection from fishermen and operators as well. They argued that the closure would result in wasteage of early Chums, the bread-and-butter item of the district; and that weather conditions in the Peninsula district imposed limitations on operation which made the 72-hour closure not only unnecessary but punitive.

● *KING CRAB QUESTIONS*—King crab operators generally supported protection of the crabs during moulting periods, but not by the means the Service suggested — a 5-months closed season except in Bering Sea from January 1 through May.

This was termed a "shot gun" closure which would shut an enormous area in an effort to protect crabs moulting in a few spots; and would utterly stifle exploration and the development which would ease the strain on the now-known populations.

Several alternative suggestions were made, one based on that which Mr. Suomela applied in Oregon: closure of an area whenever the percentage of soft crabs in the catch was above a minimum tolerance.

Heavy slaughter of moulting female crabs in Alitak Bay in 1954 was charged; with the argument that closure of fishing under such conditions falls within the Service's authority to prevent waste, and is a responsibility which should not be shirked.

● *HERRING QUOTA UP* — Doubling of the herring quota for reduction purposes in Southeast Alaska was proposed by the Service, with the provision that not more than half of the 100,000-bbl. quota should be taken before July 7; and not over half of it off the coasts of Baranof and Chichagof Islands between Cape Edgecomb and Cape Bingham.

This obviously was an effort to placate the trollers of the Sitka district while granting the herring plants more fish; but in this it failed, as Mrs. Myrth Sarvela, spokesman for the Sitka fishermen, made abundantly plain. She said that they were unrelenting in their position that the herring population of Southeast Alaska should be fished only for food or bait; and otherwise reserved as food for salmon and halibut.

The herring industry, plant operators and fishermen, did not agree.

Ecuadorian Interests Buy Bait Boat "Astorian"

The bait boat *Astorian,* formerly owned by Olaf Johnson, has been sold to Ecuadorian fishing interests.

The new owner is Lorenzo Tous, Ecuadorian fishery expert, who expects to place the boat under Panamanian registry. The sale was negotiated by Jerry's Boat Sales of Terminal Island, and the boat was overhauled at Harbor Boat & Yacht, San Diego. Among the outfitting tasks was fiberglassing the bait tanks and overhauling the refrigeration.

Frank Simon, Wilmington Brokering Fish Boats

Frank Simon Associates are actively in the commercial fishing boat brokerage business at the Colonial Yacht Anchorage, Berth 205-A, Wilmington, and are offering some excellent buys in all types of fishing craft.

Cadet Sounders Shipped

R. H. Conley's Newport Beach fishing boat has been equipped with a Cadet Indicator, a Raytheon unit, through Nautical Radio.

The new small Cadet Recorder has been placed aboard the Monroe Bros. abalone boat, **La Casita** of Newport Beach.

IMPORTANT NOTICE TO ALL COMMERCIAL FISHERMEN!

For generations leading fishermen up and down the West Coast and Alaska have become accustomed to the Superior Quality Netting manufactured of Bibb Porterdale Pacific Coast Lay Seine Twine.

The Fish Net & Twine Company will continue to make this netting available to the fishing industry as this famous brand of seine twine is being used exclusively in the manufacture of all cotton netting produced in our factory.

WALTER F. CONKLIN
President

The FISH NET & TWINE COMPANY
310-312 BERGEN AVENUE • JERSEY CITY 5, N. J.

Serving the Fishermen's Needs for Over 100 Years

DISTRIBUTED BY

FISHERMEN'S CO-OPERATIVE ASSN.
SAN PEDRO, CALIFORNIA

FISHERIES SUPPLY COMPANY
SEATTLE, WASHINGTON

Public Financing Proposed To Build Tuna Clippers

The prospect was good that San Diego might soon see the laying of the keels of four new tuna clippers, as indicated by the fact that California Tuna Fleet, Inc., has filed a registration statement with the SEC for $4 million of 6% sinking fund debentures due 1966, and 160,000 shares of 5 cents per common stock to be offered to the public in units of $500 of debentures and 20 shares of common stock. Barrett Herrick & Co. are named managing underwriters.

California Tuna Fleet, Inc., has outstanding 160,000 common shares, of which 70% are owned beneficially by Barrett Herrick and 30% by National Marine Terminal, Inc., San Diego.

Net proceeds of the offering are to be used to purchase for $1,439,335, National Marine's undivided interest in 17 tuna clippers, subject to certain liabilities of $681,343, to build for $2,020,000 four tuna clippers, and the balance for working capital and general corporate purposes.

The new construction hinges, of course, on the approval by the SEC of the offering, according to officials of the United States National Bank of San Diego.

It is presumed that the new boats will be built by National Steel & Shipbuilding Co., San Diego, of which C. Arnholt Smith is president and W. E. Hirtensteiner, vice president and general manager.

George Dew is president of National Marine Terminal, Inc., with Edwin R. Kovalcheck, fleet manager.

Pacific Dragger Dies While Fishing Shrimp

John Saarinen, veteran Astoria trawler, who with his son Arthur took their boat *Hermes II* to the Gulf of Mexico a few months ago to trawl for shrimp, died in Galveston late in the fall. He was 82.

Tunaboat Assn. Contract Plan Seeks 10-Day Discharge Rule; Would Keep Late 1954 Prices

Approximately 7,000 tons of tuna were being held under refrigeration aboard tuna clippers in San Diego, waiting to be unloaded for canning, early in November. One tuna clipper laid at dock some 47 days before her frozen cargo was processed by the contracting cannery.

It was estimated that such a day-to-day "warehouse afloat" proposition was costing each tuna clipper an average of $150 per day, not including loss of fishing time—$300 per day if the estimate were to include the days lost to the boat by delay in returning to the fishing grounds.

The American Tunaboat Association, as it approached the year of 1955 was preparing to negotiate new contracts with tuna canners under the Fish Marketing Act of the State of California. With the exception of a provision for unloading vessels under canner's contract within 10 working days after the clipper's arrival in port, the new contract is essentially the same as that prevailing during the latter months of 1954.

The new contract to be submitted to California tuna canneries states that "Canner agrees to unload at a minimum from vessels in Schedule A (American Tunaboat Association vessels), the total tonnage of tuna listed below at the monthly amounts here listed, viz:

January	6%	July	12%
February	6%	August	12%
March	6%	September	12%
April	6%	October	12%
May	6%	November	5%
June	12%	December	5%
Total tonnage			100%

"The total tonnage noted above shall be 325% of the capacity tonnage of vessels in Schedule A at the time this agreement comes into force, corrected from time to time according to the provisions of paragraph 3 above."

In the contract it is further stated that all fish unloaded to the canner from vessels in Schedule A after January 1, 1955, not the result of trips begun in 1954 to fill unfilled quotas then existing under agreements between canners and the ATA, shall be applied on the total tonnage and the monthly quotas of sub-paragraphs (A) and (B).

The price of Yellowfin and Bigeye tuna, under the proposed new contract, would remain at $330 a ton; that of Skipjack, $290.

Dies Aboard Boat

Biago Cuomo, owner of the *Mercury* out of San Pedro, died aboard his boat in late October. He was a native of Ischia, Italy, and had lived in San Pedro for 34 years. He leaves his wife, two nieces, two nephews, three sisters and three brothers.

MRS. JOHN SIMA is the new president of the Fishermen's Cooperative Association Auxiliary, San Pedro. Executive officers serving with Mrs. Sima include Mmes. Lawrence Zuanich, Tom Miller, Roy Katnic and John Zuanich. Board members are Mmes. Michael Thomas, Vincent Budrovich, Paul Biazevich, Ted Lucich and Joe Riera.

Protect your Product

USE MERCHANTS QUICK SERVICE

Our 9 large, modern warehouses are equipped to give you the fastest, most efficient freezer service available.
Not merely the desire but the ability to render service.

You are invited to visit our warehouses and inspect our storage conditions.

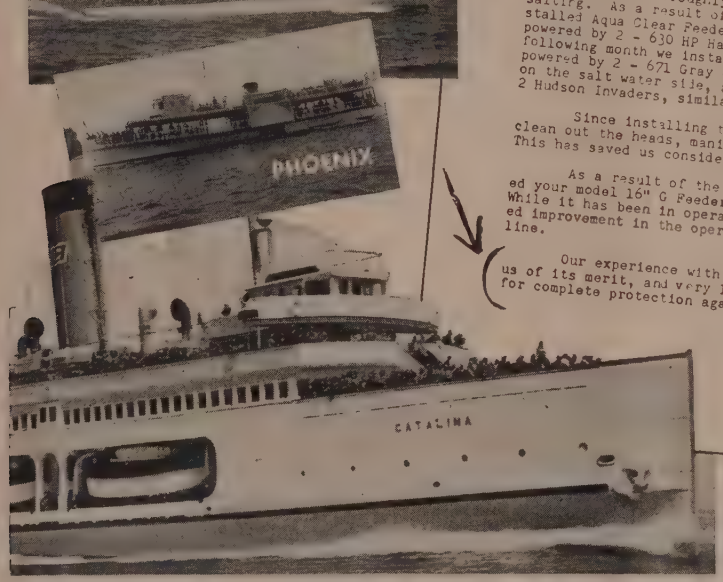
Full information and illustrated folder on request.

MERCHANTS REFRIGERATING CO.

ESTABLISHED 1889

Dept. PF, 17 VARICK STREET, NEW YORK 12 • TEL.: WAlker 8-1600

Catalina GOES ALL OUT FOR AQUA-CLEAR Feeders



CATALINA ISLAND STEAMSHIP LINE

CATALINA TERMINAL • P.O. BOX 847 • WILMINGTON, CALIFORNIA

July 2, 1954

Mr. John N. Bergh,
West Coast Representative,
Sudbury Laboratory,
221 Pomona Avenue,
Long Beach 3, California.

Dear Mr. Bergh:

In September 1952, we installed two Aqua Clear Feeders on the Glass Bottom sightseeing boat "TOYON", which is powered by two Chrysler Royals, salt water cooled. We had been experiencing the usual trouble of rusting and salting common to all engines so cooled, and were anxious to put a stop to it, if possible.

After six months of continuous operation, we inspected the cooling passages very thoroughly and were happy to find no evidence of rust or salting. As a result of this excellent performance, in March 1953, we installed Aqua Clear Feeders on the Passenger Cruiser "DESCANSO", which is powered by 2 - 630 HP Hall-Scott Invaders and salt water cooled. The following month we installed Feeders on the sightseeing boat "BLANCHE W.", powered by 2 - 671 Gray engines, fresh water cooled, with a heat exchanger on the salt water side, and on the Glass Bottom Boat "PHOENIX", powered by 2 Hudson Invaders, similarly cooled.

Since installing the Feeders, we have not found it necessary to clean out the heads, manifolds, and blocks as was formerly necessary. This has saved us considerable lay up time and expense.

As a result of the excellent performance on these boats, we installed your model 16" G Feeder on the sanitary line of the S. S. "CATALINA". While it has been in operation only two months, we can already see a decided improvement in the operation of the valves and floats along the sanitary line.

Our experience with the Aqua Clear Feeder has thoroughly convinced us of its merit, and very low cost of operation, and we can recommend it for complete protection against rust, corrosion and salting.

Very truly yours,

W. L. Scott

W. L. Scott, Port Engineer

Catalina, California's fabulous island resort, is a mecca for thousands of tourists... carried annually by the Catalina Island Steamship Line. For their comfort and safety as well as efficient operation, Catalina engineers quickly saw the advantages of AQUA-CLEAR Feeders. Mr. Scott's letter tells its own story.

You Can Use Raw Sea Water

—without Rust, Corrosion or Salting Down

More than 25,000 enthusiastic users can tell you that Sudbury's AQUA-CLEAR Feeder completely protects sanitary lines, fire lines, air conditioning equipment, refrigeration and ice plants... as well as direct cooling systems for marine engines... from danger of rust and salting down. Increases efficiency, cuts maintenance expense. No moving parts to wear or breakdown.

SUDBURY LABORATORY, Box 808, South Sudbury, Mass.

Dealers: Write for Special Offer.

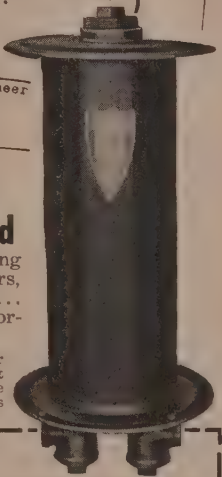
West Coast { John Bergh, 221 Pomona Ave., Long Beach, Calif.
{ Bruce Rutherford, 1954 1st Ave. South, Seattle, Wash.

Florida— John Burton, 4520 S.W. 62nd Ave., Miami, Fla.

Throw Your Heat Exchanger Troubles Overboard

You can actually cool your engine using direct salt water without heat exchangers, expansion tanks and complicated piping... with complete protection from rust, corrosion and salting down.

Made for all size engines. Only $128.75 for Feeder to handle 1½-in. pipeline... maintenance not over $10 a year. Feeder to handle 4-in. pipeline costs only $547, with refill chemicals costing less than $25 per year.



SUDBURY LABORATORY,
Box 808, South Sudbury, Mass.

Send me your latest bulletins on marine engine cooling systems and how the AQUA-CLEAR Feeder gives complete protection from rust, corrosion and salting down. Also information on other Sudbury Quality Products checked at right, **FREE.**

Name.....

Address.....

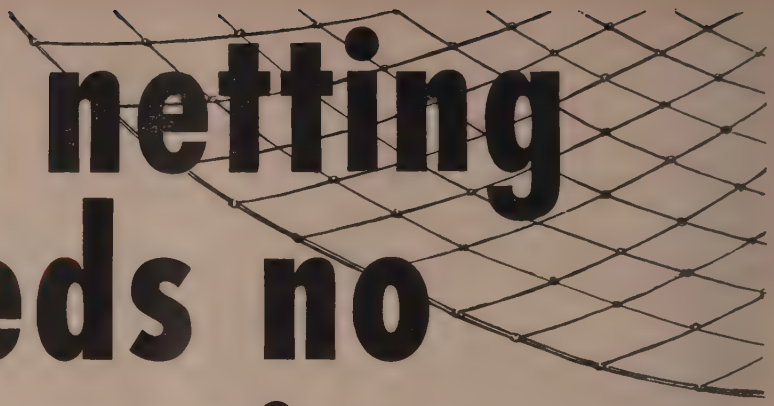
City.....Zone.....

State.....

Other Sudbury Products
- ☐ Sky-Vent
- ☐ Port-Vent
- ☐ Vapor-Proof Switch
- ☐ Automatic Engine Alarm
- ☐ Sav-A-Tank Cartridge
- ☐ Automatic Bilge Cleaner
- ☐ Boat Zoap
- ☐ Sail Zoap
- ☐ Liquid Aqua-Clear
- ☐ Gusher Bailing Pump
- ☐ Barfair Sail Preservative
- ☐ Aqua-Shed Waterproofing
- ☐ Aqua-Clear Crystals
- ☐ Crystal Kleener

AQUA-CLEAR Feeders
Double the Life of Marine Engines

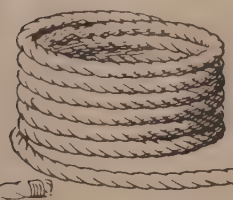
Nylon netting needs no preservative



RESULT—nets weigh less, save you money, time and labor for upkeep

Nylon is a man-made fiber. Marine organisms, fungus, mildew, oil or gasoline have little effect on nylon. This means you save the cost of preservatives and the labor of applying them . . . nets can be left in the water indefinitely—brought out only for cleaning.

This is only one of the ways fishermen are proving nylon's economy all over the country. Netting made of Du Pont nylon helps cut your costs for these reasons, too—



GREATER STRENGTH
. . . LESS WEIGHT
. . . LONGER-LASTING

NYLON ROPE

Nylon rope gives you extra strength, high shock absorbency, flexibility and durability . . . *plus* lighter weight for easier handling. Nylon resists abrasion and rot, needs no drying or preservatives . . . gives far longer service. Whenever you buy rope or cordage, get the extra values of Du Pont nylon.

1. LASTS LONGER! Because nylon keeps its great strength, resists rot and wear, nets of nylon last longer—reduce your mending and replacement costs.

2. NEEDS NO DRYING! Nets of nylon can be used haul after haul, day after day without drying. This reduces the number of nets formerly needed to maintain continuous profitable fishing. Nylon nets can be stored wet, too.

3. ABSORBS LITTLE WATER! Nets of Du Pont nylon gain less than half the weight other nets do when wet. This makes them easier to handle, cuts your marine power costs.

4. WEIGHS LESS! Where less weight is important, nylon's great strength allows use of smaller twines, making nets lighter, easier to handle. Pound for pound, too, you get a greater length of netting with nylon.

Only nylon netting gives you *all* these important advantages and cost-saving features. When buying netting, compare the ways *nylon* can improve *your* fishing operation, cut your costs, and increase your profits. Contact your net supplier for information on the latest in nylon.

Profit-wise fishermen use **NYLON** *to cut operating costs*

DU PONT
REG. U. S. PAT. OFF

E. I. DU PONT DE NEMOURS & COMPANY, INC.
TEXTILE FIBERS DEPARTMENT
WILMINGTON, DELAWARE

BETTER THINGS FOR BETTER LIVING
. . . THROUGH CHEMISTRY

SCOPE and SOUNDER

Monthly digest of present-day pioneering methods and equipment in world fisheries.

By PETRALE*

Californians Are Successful In Tuna Tagging Project

California biologists have continued to tag tuna in the waters off Southern California and Lower California. The state's research vessel *N. B. Scofield* recently returned from a two-month cruise during which a total of 1,867 tuna were tagged. The majority of tagged tuna were Albacore and yellowtail. A number of the yellowtail tags have been recovered, but no Albacore recoveries had been reported to date of writing. The fish were tagged with the conventional spaghetti tag developed by California biologists.

Plastic Trawl Float

During the past several years, the West Coast trawl fisheries have adopted several new types of floats for use in deep-water trawling. In 1951, the Phillip's deep-sea float was imported for use in the Pacific perch fishery and recently an East Coast American firm has made a float similar to the English trawl float. The most recent development in trawl floats is a new plastic float which is being made by a Florida firm. The float, made of "virgin polystyrene", is said to be very strong and to be capable of being fished at depths exceeding 150 fathoms. The plastic floats are elliptical in shape and 5″ in diameter and 8″ long. The float has been extensively tested and has been placed on the market.

Dividends From Research And Mesh-Size Rule

As a result of mesh experiments carried out under Pacific Marine Fisheries Commission auspices by biologists of the three Pacific states, the Oregon Fish Commission established a 4½″ minimum trawl mesh size which became effective in 1954.

Catches made during the experiments showed that retention of unmarketable Dover sole ranged from 69% using 3″ mesh to only 2% using 4½″ mesh. From studies made at sea the average discard of Dover sole on Oregon trawlers was estimated at 25% of the number of this species taken. The total catch of this species in Oregon for the period 1946-1952 was 33.1 million pounds, or about 16.6 million fish.

Sig Westrheim, an Oregon biologist, reasons that if 25% is a fair estimate of the discard the Dover sole wasted during this period amounted to 5.5 million fish. He concludes that most of the discarded fish would have reached a marketable size within two to three years. Thus the loss to the fishermen was significant.

Canada Seeks Whale Data

Fisheries Research Board of Canada has published a Guide to the Whales, Porpoises and Dolphins of the Northeast Pacific. The paper was published as an introduction to the whales of the area, and with the hope of obtaining additional information on those seen by fishermen and other observers at sea.

Sketches show all the whales of the area, and space is provided on the back of the pamphlet for recording data on whales seen. The writer, Gordon C. Pike, urges fishermen who observe whales at sea to record the information requested in the paper. Those interested in obtaining copies of the article should write: Whale Investigations, Pacific Biological Station, Nanaimo, B. C.

Hawaiian Long-Line Fishery

The September issue of the *Commercial Fisheries Review* carries an article on the Hawaiian long-line fisheries. During recent months, "Petrale" readers have expressed considerable interest in the long-line method of capturing tuna. This article is fairly comprehensive and covers many of the aspects of fishery in the island area, covering such topics as the size and species of tunas caught, season variations in catches, catch and efficiency of boats, and economic factors involved in the fishery. Fishermen interested in this material should write to U. S. Fish and Wildlife Service, 2725 Montlake Blvd., Seattle, Washington.

Research Institute

The Washington State Department of Fisheries presented its first Research Institute last month. The Institute, made up of 19 speakers, presented a series of talks on many aspects of the Department's research. Topics of discussion included Otter Trawling, Power Dams, Shellfish, Salmon Hatcheries, Sea Migration of Salmon, Herring and Environmental Research. The first "Fisheries Institute" was given at Western Washington College. The purpose of the Institute was expressed by the Department's Director, Robert J. Shoettler, as follows:

"It is the belief of the Washington Department of Fisheries that biological and associated technical sciences offer the only certain hope for perpetuation — and restoration — of the State's salmon and other marine resources.

"To create a dynamic fisheries program based on the scientific approach requires adequate finance as much as it does adequate intelligence. Adequate funds have been made available by the State Legislature since 1951, when the current salmon rehabilitation program was initiated along the lines of the one so successfully undertaken by the Internation Sockeye Commission. Such a program must lend itself to practical application not only in the regulation of the fisheries, but likewise in the solution of many urgent problems besetting them, as in the case of fish passage at power dams. The Department of Fisheries has and will continue to use its research findings for the immediate betterment of the fish resource through management and restorative processes.

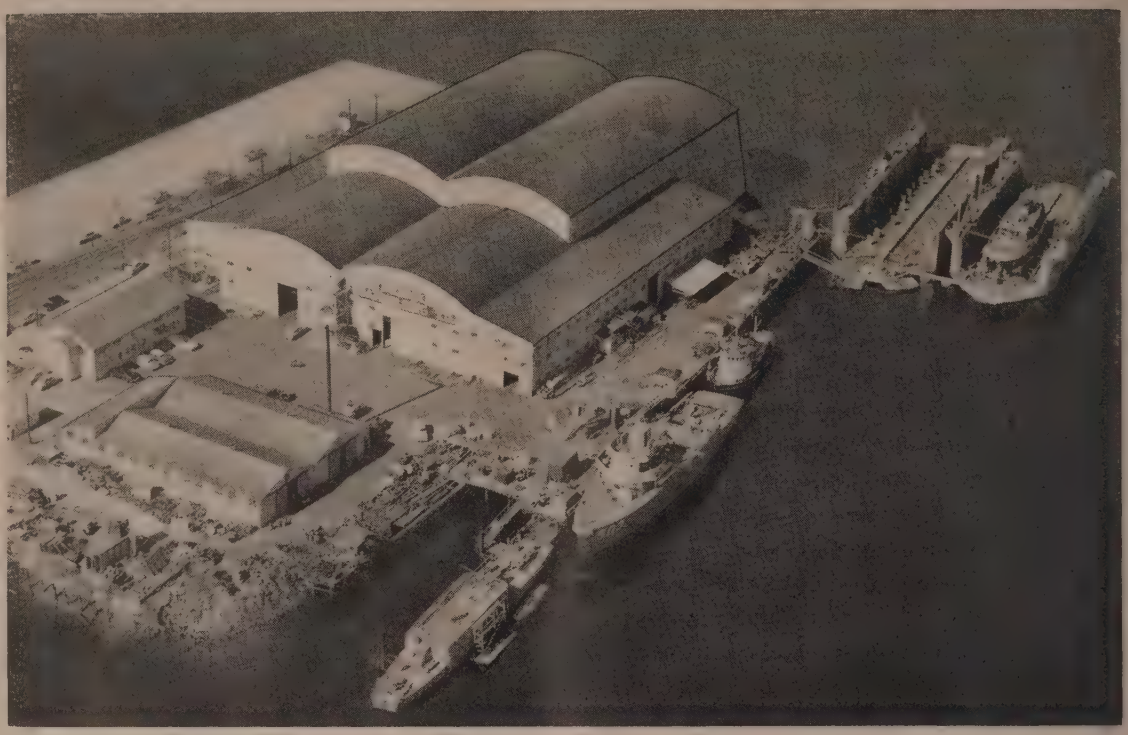
"There is a further requirement. No fisheries agency operates in a void, alone with the animals it seeks to protect and manage. A run of salmon would have no value, other than possibly esthetic, were it not for its economic and recreational import on the human beings who seek to harvest it. For this reason a scientific management program must benefit both fish and people, and must certainly have the understanding of the latter if it is to be successful. That is the purpose of the Department's first Fisheries Research Institute."

A. Tarantino, Fort Bragg, has powered his new 50′ combination boat with a GM 6-71 diesel engine, purchased from and installed by West Coast Engine & Machine Works, Fort Bragg.

***Petrale will attempt to answer questions from readers; and will welcome correspondence relative to developments which fishermen may consider worthy of inclusion in future editions.**

Comments, questions and contributions should be addressed to: PETRALE, Care Pacific Fisherman's News, 71 Columbia St., Seattle 4.

REPOWERING THIS YEAR ? ? ? Let Our Skilled Technical Staff Save You Time and Money



Our uniquely located Yard, Outfitting Dock and Machine Shop, Has Direct Access to Open Water—
NO BRIDGES . . . and now—TWO FLOATING DRYDOCKS

• WE BUILD • WE REPAIR • WE MAKE CONVERSIONS

To the Commercial Fisherman we offer:—

- THE FINEST IN NEW CONSTRUCTION & REPAIR FACILITIES
- ENGINEERING DEPARMENT
- COMPLETE MACHINE SHOP
- METAL FABRICATING SHOP
- PIPE SHOP
- ELECTRIC SHOP
- PAINT SHOP
- DEEP WATER OUTFITTING DOCK
- 35 TON STIFFLEG CRANE
- 10 TON MOBILE CRANES
- RAILWAY SPUR TRACKAGE
- 200 TRAINED CRAFTSMEN TO SERVE YOU
- NORTHERN LINE DECK MACHINERY

ALL RATES COMPETITIVE

Your smallest Job is important to us—
COME AND VISIT OUR PLANT AND DISCUSS YOUR PROBLEMS

The welcome mat is out for newcomers as well as for our friends of long standing

PLANNING ON REPOWERING THIS YEAR?

Our repowering facilities are the most complete available . . . all makes, all sizes, all models. We can handls your job efficiently and fast, and at the lowest cost.

TACOMA BOATBUILDING CO., INC.

132 SITCUM WATERWAY PHONE: MARKET 8138 TACOMA 2, WASHINGTON

Designers and Builders of Wood and Steel Commercial and Fishing Vessels Since 1930

ARNE STROM, *Owner*

Converted Seiner Long-Lines Yellowfin in Gulf of Mexico

Santo Antonino, which delivered what is considered the first commercial catch of tuna from the Gulf of Mexico, is a former San Pedro purse seiner, converted to a bait boat, but in this case was fishing long-line gear.

She is operating for South Pacific Canning Co. and its affiliate, National Canning Co. of Ponce, Puerto Rico. The Yellowfin, although delivered to Pascagoula, Miss., was packed by the Puerto Rican plant, according to officials of the South Pacific Canning Co., of Long Beach.

San Antonino was captained by John Rawlings, and landed 12½ tons of prime Yellowfin tuna taken in the central Gulf region. The fish weighed about 100 lbs. each.

Last spring Fish and Wildlife Service specialists aboard the exploratory fishing vessel *Oregon* discovered that Yellowfin were widely distributed in the Gulf and could be taken at subsurface levels with modified Japanese-style longline gear. Three successful tuna trips have been made to various parts of the Gulf and have found that the central Gulf's northbound current, between 88° and 90° west longitude, affords the best Yellowfin fishing at the present time. Making use of this information, the *Santa Antonino* proceeded to this area and reported catches as high as 9 tuna per 100 hooks, a very good showing for this type of fishing.

Another commercial vessel, a converted red snapper schooner operating out of Pensacola, Fla., also has begun tuna fishing in the Gulf. Commercial interests in Mississippi are now reported to be outfitting a longline vessel, scheduled to begin tuna operations soon.

Monterey Boats Swamp

Two vessels were under water in one day last month in Monterey harbor. One broke from its moorings and was stranded on the beach, and the other sank at its moorings.

The 40′ combination boat *Reliance*, skippered by Sal Ventimiglia, broke from its moorings and drifted onto the beach.

The *Wanderlust*, a troller, sank stern first at its moorings. It is registered to N. D. Adcock.

Veteran Fishing Boat Builder Passes Away

The many friends of Dominic LaBruzzi, 58, well known San Francisco Bay area boat builder were saddened to learn of his death last month, at his home in Oakland. He had been ill for the past eight months.

Dominic's father was a San Francisco fisherman in the days when fishing boats had lateen sails and plied their trade out of Meiggs Wharf. Dominic learned the boat building business from G. B. Beviaqua, founder of the Genoa Boat Works, Fishermen's Wharf, San Francisco. He started in business for himself in 1918 on the Wharf, and sold out in 1932. For a number of years he worked for other boat builders and shipyards in the area.

In 1946 he went into business with his son, Lawrence, as D. LaBruzzi & Son, on the Oakland Estuary. This business was sold early this year.

Dominic leaves a wife, and his son, Lawrence, who has been appointed superintendent of the San Rafael Marine Repair Co., Division of North Bay Electric Co., San Rafael, now equipped with a complete propeller repair and repitching department.

CATERPILLAR
REG. U. S. PAT. OFF.
MARINE DIESELS — ELECTRIC SETS
NC MARINE
Expert Mechanical and Electrical Service
Dockside Facilities on Lake Union
A DIVISION OF NORTHERN COMMERCIAL COMPANY
SEATTLE — 2500 Westlake Ave. N. — Alder 6300 JUNEAU KETCHIKAN

SAVE UP TO 50%!
On Your Battery Requirements
Our rebuilts are assembled with all new heavy duty plates and rubber separators, the same as our new batteries, except we use your case.
New Battery Guarantee!
Write for prices, giving voltage and outside dimensions of case.
Work completed in 2 to 5 days, depending on size.
Keystone Batteries, Inc.
Manufacturers of New and Rebuilt Diesel Batteries
1695 Galvez Ave., San Francisco 24
Phone: MIssion 7-3034

"THE HOUSE OF FRIENDLY SERVICE"
NORDBY
SUPPLY COMPANY
For a Successful 1955 Gillnet Season
BUY
Pauls LOCKNOT Gillnetting
BONDED NYLON AND LINEN
EST. 1830 WALL ROPE
WALL'S POT WARP
for Better Crab Fishing
PETTIT PAINTS
SKILSAWS & TOOLS
1300 WESTERN AVE., EL 1364
SEATTLE 1, WASHINGTON
FISHERMEN'S DOCK
SEATTLE 99, WASHINGTON

Lou Brito, owner-master of the 120 ft. tuna clipper, M.V. Southern Pacific.

"...engines on UNITEC show minimum liner wear."

"It's my opinion that Union's Unitec motor oil has contributed greatly to the fine service record of our main engine... an 800-hp Enterprise diesel.

"In comparing notes with several skippers who use various brands of oil in identical installations, I find that engines on Unitec show minimum liner wear. During the past three years that I've used Unitec in the crankcase of the Enterprise I've been amazed at how little wear can be detected in the vital parts of this engine."

Small wonder Unitec is such a favorite in the tuna fleet. It's a high alkaline reserve heavy-duty oil made with 100% paraffin base stock. So if excessive wear is becoming a problem, ask your nearby 76 dock operator about Unitec for your engine.

UNION OIL COMPANY 76
OF CALIFORNIA

Los Angeles: *Union Oil Bldg.* • **New York:** *45 Rockefeller Plaza* • **Chicago:** *1612 Bankers Bldg.* • **New Orleans:** *644 National Bank of Commerce Bldg.* **Atlanta:** *401 Atlanta National Bldg.* • **Kansas City, Mo.:** *921 Rialto Bldg.*

Voters Reject Fish Bills

● Voters of Washington and Oregon crushed two initiatives dealing with salmon fishing in their voting Nov. 2.

Neither of the proposals came even close to passage, and that in Washington failed by more than 2-to-1.

The voters' actions on these measures may be taken to demonstrate that they reacted to the initiatives something like this:

1. Having qualified and competent state fishery departments with adequate authority to carry on sound conservation of the salmon as scientific research might direct, the citizens of the states are unwilling to undertake to deal with conservation matters through means of the initiative.

2. The salmon are the property of all the people of the state and should not be reserved to any special groups of fishermen, whether they fish for sport, or that others may have food.

3. Gear to which all men have access, and which is not wastefully destructive of the resource, may be legitimately employed in harvesting the salmon under a program of conservation.

SAN DIEGO BITE-SIZE ITEMS

● *PURR* is the new cat food, packed by Westgate-California in San Diego and distributed by Sun Harbor on Terminal Island. This 6½ oz. pack is finding a new use for the red meat of the tuna, ordinarily discarded in the packing of tuna for human consumption. . . . Paul Jepson is general manager of Westgate-California's operations in Peru, with headquarters, Paita, while Garnett Stevens is fleet manager for *Sea Giant, Patria, Fatima,* all fishing under National Marine Terminals Inc., San Diego, of which George Dew is president, Ed Kovalcheck, fleet manager. Dew was in South America the last weeks of October. . . .

VAN CAMP SEA FOOD CO., San Diego, was receiving a trickle of Albacore during the last weeks of October. . . . Shepherd Marine recently sold a D-13000 "Cat" engine for Manual Obregon's *Navigador* out of Guaymas, 3:1 reduction, with front power take-off. . . . The same model "Caterpillar" was sold by the same company to Armadores del Pacifico, Guaymas, 2:1, front power take-off. Both boats are shrimp trawlers. . . . *Petrel,* a Kettenburg-38, has been sold to fishing interests in Costa Rica. She is "Caterpillar" powered. . . . Bob Mason has become general manager of the Crofton Company's new store near the American Tunaboat Assn. (General Motors distributors). He was formerly an owner in Diesel Technical Service.

KETTENBURG BOAT WORKS has re-engined a tender on the Mayflower with a Chrysler Crown. . . . Bendix depth recorders have gone aboard the *Uncle Sam* and the *Mary B.*, San Diego. . . . *Spicewood,* tuna freezership, was reported to have been purchased by National Marine Terminals, Inc., and was docked at San Diego in late October, waiting unloading. . . . The *Navigator* has a new tuna tender, a 17-footer, powered with a 120-hp. Lathrop engine, Walters gears, 1½:1, and fiberglassed. . . . A. X. Madruga, father of a family of San Diego tuna fishermen, died at his home in late October, at the age of 75. His survivors include six sons: Anthony, Ralph, Edward, Joseph, John and Richard, all of San Diego. He was born in the Azores.

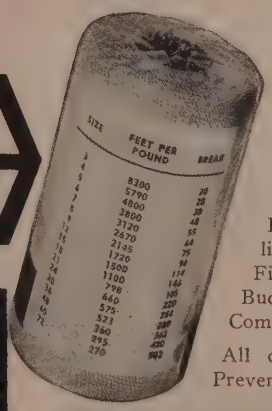
"Sea Lark" Resumes Fishing For Tuna

The 165′ *Sea Lark,* purchased by National Marine Terminals Inc., San Diego, from Nick Bez, was scheduled to leave on her maiden voyage in late October as a fisherman for Westgate-California.

An extensive overhaul job on the clipper was accomplished by National Steel & Shipbuilding Co. Her new skipper is Fernando Medina, youngest of the Medina brothers. He formerly captained the *Queen Mary,* and is a co-owner in that boat and in the *Bernadette.*

Another
BROWNELL EXTRA
Nylon Filament
SEINE TWINE TABLE

When buying Nylon Seine Twine, look for this Brownie Trademark. It's your assurance that it was made especially for you of 100% DuPont Filament Nylon. Heat-set to prevent untwisting.



Brownell, the largest manufacturer of Nylon Seine Twine, takes another step forward by introducing on each package of Brownie twine a complete table listing the feet per pound, size, and breaking point.

Brownell also makes a complete line of Hot-Stretched Bonded Filament Nylon for Trot Lines, Buoy Lines, Trawl Lines, etc. Also Combination and Spun Nylons.

All our Nylons are Processed to Prevent Excessive Untwisting.

PACIFIC COAST DISTRIBUTOR FOR BROWNELL NYLON PRODUCTS
CONSOLIDATED NET & TWINE CO., INC.
Fisherman's Terminal Phone: ALder 6387 Seattle 99, Wash.

BROWNELL & CO., INC.
MOODUS, CONNECTICUT

when you put your

make sure it's

cash on the line...

PLYMOUTH

For 130 years commercial fishermen, as shrewd businessmen, have made it a hard and fast rule to trust their catches with no one but the ropemakers of Plymouth.

Plymouth bolt line, buoy line, drag rope, net rope, pot warp, purse line, rib line, Italian hemp and all Plymouth fishing ropes are engineered for their jobs, are second to none in value and service. It's your money. Put it on the rope and line you can trust—Plymouth.

Plymouth Cordage Company

Plymouth, Massachusetts · New Orleans, Louisiana

PLYMOUTH TRADE · 1824 · MARK

Standard Engineer's Report

CASE HISTORY
PRODUCT Chevron Pressure Primer System
INSTALLATION U.S.S. Endurance

Aluminum diesels use primer system for fast starts

CHEVRON PRESSURE PRIMER SYSTEMS are installed on all 6 Packard aluminum-alloy V-12 diesels in the Navy's new anti-magnetic mine-sweeper, the U.S.S. Endurance. Each primer system includes a discharger (two are circled, above) which releases Chevron Priming Fuel from a pressurized bulb. Under 250 pounds pressure, the fuel sprays through an atomizing nozzle into the intake manifold.

DEVELOPED FOR THE ARMED FORCES, the Chevron Pressure Primer System alleviates hard-starting troubles on all diesel and gasoline engines. Chevron Priming Fuel is so effective it has started big diesels in less than 10 seconds at 50 below zero, gasoline engines at 65 below! The steel bulbs and enclosed system give complete safety of handling and storage.

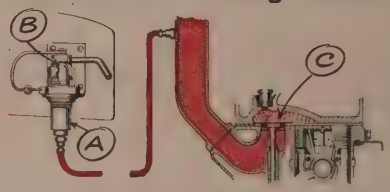
FREE FOLDER tells you more about Chevron Pressure Primer System and how to install it on different engines. Write or ask for it today.

FOR EXPERT HELP on lubrication or fuel problems, call your Standard Fuel and Lubricant Engineer or Representative; or write to 225 Bush St., San Francisco.

CHEVRON

TRADEMARK "CHEVRON" REG. U. S. PAT. OFF.

How the Chevron Pressure Primer System alleviates hard-starting troubles



A. Simple, rugged, safe discharger prevents fuel leakage; can be mounted on instrument panel for one-man starting.

B. Small, strong steel bulbs protect fuel from water and dirt; when discharged, fuel injected under pressure results in fine spray and immediate starts.

C. Volatile Chevron Priming Fuel atomizes in the induction system at temperatures as low as -65 F. Pressure or weakest spark fires mixture, starts engine. Engines can be started with low compression pressures and weak ignition.

STANDARD OIL COMPANY OF CALIFORNIA

A. N. NILSON — *Dynamite Kid* — Alaska
TONY KIRINCICH — *Merry Chase* — Vancouver
N. J. TARABOCHIA — *Nancy Rose* — Gig Harbor
W. J. SMITH — *Eigil B.* — Ketchikan
ART PAQUET — *Marian F.* — Astoria

—Photos by Caterpillar Tractor Co.

SAN PEDRO SEINE SETS

● *MRS. JENNIE MEZIN*, mother of fishermen John, Nick, Frank and Sam Mezin, died at her home in San Pedro at the age of 86, in late October. She was born in Yugoslavia and had lived in San Pedro for 34 years. She left 18 grandchildren and 21 great grandchildren. . . . The theme for San Pedro's Rose Bowl entry was the product of Mrs. Rosie Blakeman. The theme? Holy Mackerel. Andy Jurun was chairman of the contest. . . . Peter Guarrasi has won the fishermen's cable splicing contest, Fishermen's Fiesta, three years in a row and so has Joe Pilato. Nick Knezic finished second to Pilato. In the Fiesta's net mending contest, Sylvester Burno and James Panto tied for first place honors.

GILL AND QUILL is Star-Kist's new company paper, and very well edited by Walter Brewer and Rebecca Thomasian, the latter from Star-Kist's Laboratory. . . . Paul Gligo of Star-Kist has just returned from South Africa and by the time this issue of PFN is off the press will probably be on his way back there, with his family, to take charge of Star-Kist's association with the Seafare group of sardine canners in South Africa. . . .

JIMMY WAUGH, San Pedro Cannery Workers president, reports that a new contract, granting higher health and welfare payments, has been signed by the canners and the union. . . . Bob Finch, San Pedro's 17th District Congressional nominee, has started a series of "Tuna Times" at his home, replacing the traditional Coffee Hours. Finch wanted to highlight the need of the tuna industry to increase the consumption of tuna by American housewives. . . . Paul W. Hiller Co. recently rebuilt and modernized the Kidde Fire System on the *Star-Kist*, which is now a bait boat operating from Chile. . . . The Hiller firm has also equipped Mel Marsh's *Atun* with an Ideal Windlass. Marsh is general manager of South Pacific Canning Co., Long Beach. . . . Marine Components, Santa Monica, is handling the new Bee Jay line of bearings in the Los Angeles harbor area. . . San Pedro's Fishermen's Fiesta has received editorial and pictorial attention in the National Geographic magazine, June issue. . . . Matt Martin has replaced Anthony DiLeva on the board of directors of the Commercial Fishermen's Inter-Insurance Exchange. . . .

NEW — USED — REBUILT
Chrysler Marine Engines
MARINE ENGINES & SPECIALTIES
INDUSTRIAL and MARINE ENGINES, INC.
P&H Diesel Engines
Te 4-2567
Nevada 6-1590
24 Hour Telephone Service
Wilmington, California
804 East Anaheim Blvd.

WHAT DID WE HIT?
If a plank let go or you struck a submerged object, could you keep YOUR boat afloat?
MP bilge pumps are designed specifically for the rugged job of keeping boats afloat—protecting not just property, but human life. Protection from the sea for 4,000,000 G.I.s in two wars.
MP Marine Products Co.
1. All bronze construction.
2. Runs continuously—wet or dry.
3. Pumps its weight in water every second.
4. 27 models to choose from.
5. Capacities to 280 gallons per minute—over 16,000 gallons per hour.
Ask your local yard or dealer for more details. From $39.00
MARINE PRODUCTS COMPANY
515 LYCASTE AVENUE DETROIT 14 MICHIGAN

CONTINUALLY ON GUARD
CUPROLIGNUM prevents rot in nets, boat timbers, ropes, etc. By treating your net and equipment with CUPROLIGNUM, you prevent rot. CUPROLIGNUM has been used with outstanding success in the fishing industry for many years. Use CUPROLIGNUM — make SURE your net will hold!
CUPROLIGNUM
RUDD & CUMMINGS
1608 - 15th Ave. W. Seattle 99

When you want to catch a peak load...and keep it–

Use a net made of

NYLOCK®

U. S. PATENTED PROCESSED

NYLON TWINE

Peak loads mean money in your pocket! That's why *you* should fish with nets made of NYLOCK Nylon Twine. For fishermen *themselves* have proved that these nets actually catch from 3 to 12 times as many fish. And when you catch these peak loads – you want to *hold* them! That's another reason why stronger, longer-wearing nets of NYLOCK are so popular among fishermen in all waters.

Remember – only nets made of NYLOCK Nylon Twine are specially processed under U. S. Patent No. 2590586 to give you *all* these advantages:

- **extra strength...longer wear**
- **tighter knots...minimum slippage**
- **easier to handle – absorb less water**
- **need no drying, no preservatives...require less care**
- **less fraying and fuzzing...will not mildew, rot or discolor**

Nets made of Nylock Nylon Twine are available from:

*ADAMS NET & TWINE DIVISION
701 N. 2nd St., St. Louis, Mo.

*EDERER DIVISION
540 Orleans St., Chicago, Ill.

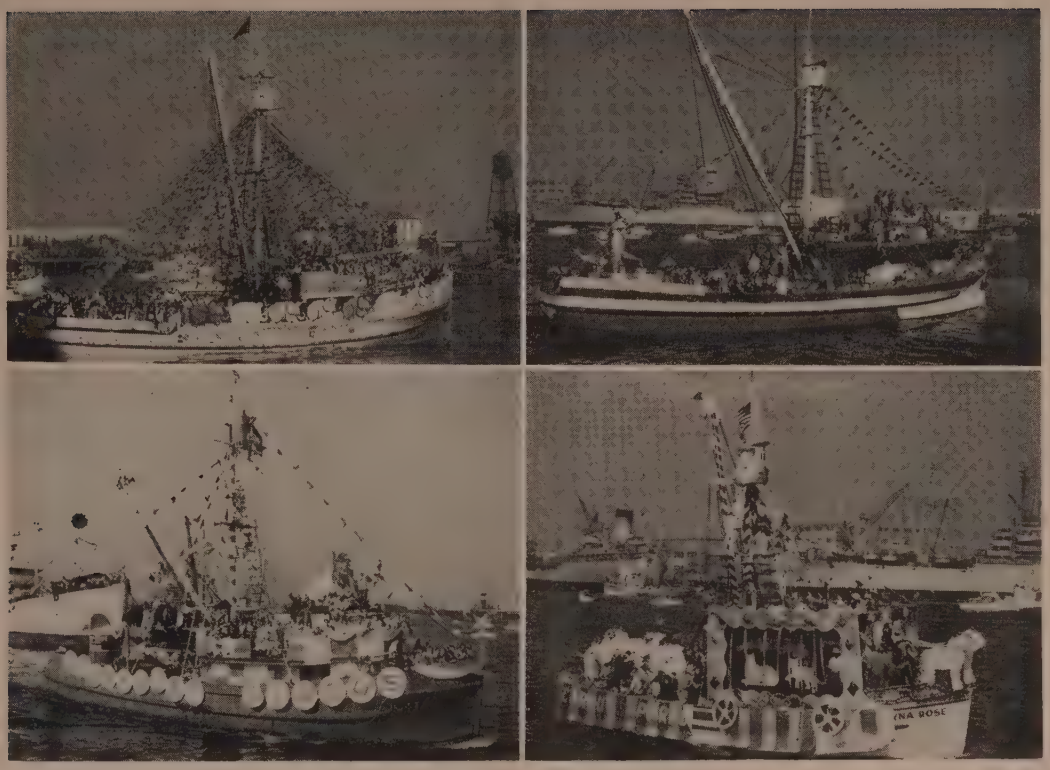
*PAULS FISH NET DIVISION
357 W. Ohio St., Chicago, Ill.
*Divisions of The Linen Thread Co., Inc.
418 Grand St., Paterson, N. J.

THE FISH NET & TWINE CO.
310 Bergen Ave., Jersey City, N. J.

A. M. STARR NET CO.
East Hampton, Connecticut

HEMINWAY & BARTLETT producers of **NYLOCK NYLON TWINE**

The Heminway & Bartlett Mfg. Co., 500 Fifth Avenue, New York • FOREIGN AGENT Turner, Halsey Co., Inc., 40 Worth St., New York



Western Explorer, in the upper left, was the sweepstakes winner at the San Pedro Fishermen's Fiesta marine parade. **Courageous,** upper right, took first in the non-commercially-sponsored class. **Jo Ann,** lower, left took first in the commercially-sponsored group as "Star Kist Circus". **Nyna Rose** placed first among the non-sponsored boats up to 60′ length. (Herb Phillips photos.)

Fishermen's Fiesta Paraders—

• Sweepstakes in the annual marine parade featuring the Eighth Annual Fishermen's Fiesta at San Pedro was taken by Capt. Frank Manaka's *Western Explorer,* decorated on a "Grand March" theme.

Other fine entries included:

Non-commercially sponsored boats:

Courageous, Andrew Kulgis, sponsored by Tuna Research Foundation; Theme: "Dig Those Crazy Tuna".

Western Monarch, John Zankich, sponsored by Fishermen's Cooperative Association; Theme: "The Lion Tamer".

Liberator, Paul Biazevich, sponsored by I.L.W.U. Fishermen's Union; Theme: "The Human Cannon Ball".

Endeavor, Sal Genovese, sponsored by AFL Seine & Line Fishermen's Union and AFL Cannery Workers Union; Theme: "Holiday for Sweets".

Commercially-sponsored boats—

Jo Ann, John Marinkovich, sponsored by Star-Kist Foods, Inc.; Theme: "Star-Kist Circus".

Nancy Rose, George Fukuzaki, sponsored by Van Camp Sea Food Co.; Theme: "Circus Parade".

St. Christina, Antony DiLeva, sponsored by American Can Co.; Theme: "The Perfect Seal".

Columbia, Steve Gargas, sponsored by Rheingold; Theme: "Circus Time".

Anton Misetich, skipper of the **Anthony M.,** host boat at the San Pedro Fishermen's Fiesta, which opened the sardine season in Southern California.

Non-sponsored boats under 60′—

Nyna Rose, John Mardesich, "Circus Parade".

Endeavor, Sam Radazzo, "Circus Clowns".

Santa Teresa, John Sima, "Greatest Show on Earth".

Sea Hawk, John Vidovich, "Under the Small Top".

Gigi, Frank Coscetti, "Nutsy the Clown".

Non-sponsored boats over 61′—

Stranger, Lawrence Zuanich, "Circus Parade".

Sea Pride, John Resich, "Under the Big Top".

Vice President Richard Nixon was the principal speaker at the Fiesta and rode in the parade aboard Capt. John Guglielmo's *St. Aniello.*

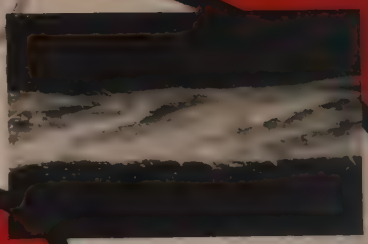
Clipper Towed Home

The Star and Crescent tug *San Diegan* returned the disabled clipper *Mary C. Canas* to San Diego in mid-October, when the vessel had mechanical difficulties near Uncle Sam's Bank on the high seas off Mexico.

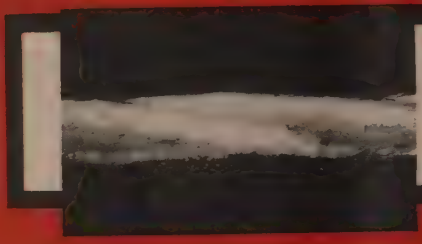
The **Maria Elena,** San Francisco party fishing boat, has been sold to Nat Calindrino, former owner of the **Martha Jane.** The engine on **Maria Elena,** a GM 6-71, is being completely overhauled at the Shoreline Diesel Maintenance Co., Fishermen's Wharf.

BARBOUR'S Big 3

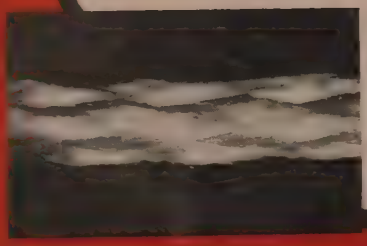
LINEN . . .
highly magnified view shows construction detail of the "Barbour's Best" linen salmon twine.



NYLON (regular) . . .
100% filament nylon . . . strong and long-lasting.



NYLON (braided) . . .
100% filament nylon netting – note braid structure.



There are the three Barbour nettings for Salmon – all are made with the double knot construction – approved and used by fishermen for generations. Each of them. Linen, Regular Nylon and Braided Nylon has its own characteristics and wherever your choice lies, you can be sure of the finest quality when you buy Barbour's.

MAKERS OF FINE NETTING FOR OVER A CENTURY

BARBOUR'S

THE LINEN THREAD CO., INC.

DOUBLE-KNOT SALMON GILL NETTING

Pacific Marine Supply Co., Seattle
Oregon Marine Supply Co., Portland and Astoria
Pacific Fishing & Trading, Seattle

California Distributors: Cincotta Bros., San Francisco and Monterey. Mariao Hardware Co., Inc., San Pedro and Terminal Island. Nuttall-Styris Co., San Diego. San Diego Marine Hardware Inc., San Diego.

POISED for her launching, **Cabrillo** is the first of the new tuna fleet, a 340-tonner built by National Steel & Shipbuilding for Capt. Joe Soares (insert) to standard National Steel type modified by Wendell H. Calkins, the yard's naval architect. She is being followed by a sistership, **Dominator,** for Capt. George Soares.

A Serious Study Of Where Clipper Fleet Income Goes

What It Costs To Catch Tuna

● From San Diego and San Pedro sails the world's largest fleet of boats fishing tuna for a livelihood. This fleet, once numbering over 200, has now been reduced by losses at sea to about 170 tuna clippers. There is a definite need for new boats, and there are encouraging signs in San Diego that efforts for interesting investors in the financing of new construction will be successful.

Pacific Fisherman has chosen at random six live bait boats to study from the standpoint of gross income from the sale of tuna and the accompanying large operating costs of fishing tuna on the high seas of the Pacific.

The following represents a composite of figures secured from the financial statements for 1953 of six vessels. Some in 1953 operated at a loss, others at a profit, and all representing operational costs of sizeable and impressive proportions.

Gross Income from sale of tuna (six boats)	$1,442,000
OPERATING COSTS	
Trip Expenses for the year, 1953	
Fuel and Oil	124,800
Groceries, provisions	67,500
Supplies (engineroom, deck and gear)	54,000
Licenses & permits, foreign	49,500
Fixed Yearly Costs:	
Insurance	91,000
Repairs	163,000
Taxes (property, etc.)	41,500
Miscellaneous (radio-telegraph, etc.)	17,500
Crew Shares (including captain, engineer)	452,000
Depreciation	127,000
Total cost before interest and boat shares	$1,187,800
Bal. available for interest and boat shares	253,000
Average per boat	42,200

That the clipper fleet of California's tuna industry represents an impressive investment and a contribution of real dollar value to related industries of insurance, boat-building and repairs, and marine supply is realistically indicated by the figures above.

● *FLEET VALUE*—Replacement of the fleet, declared in tariff and import hearings in Washington, D.C., in 1952, was given as $60,000,000. The figures on depreciation emphasize the need for construction of new, modern clippers.

San Diego and San Pedro-Long Beach boatyards for the annual dry-docking and between-trip repairs consumed approximately 10% of the six boats' gross income of 1953. This represents expenditures for overall upkeep, painting, dry docking, etc., and includes replacement of equipment or power plants or auxiliaries or major refrigeration overhauls which, with each year's depreciation of boat and equipment, become more frequent. This item includes all repairs to hull, machinery, electrical systems, and replacement of such items as radios, skiffs, radar, power dories, etc.

● *OPERATING COST* — Insurance costs—and indications point to the fact that the cost of insuring a tuna boat rises each year—in 1953 took 6% of the gross income of our six tuna clippers, roughly estimated.

From this gross, suppliers of marine fuel and lubricating oils received a solid share—six boats in 1953 paid out $124,800 or approximately 8% of the gross income, to travel to and from the far-distant tuna grounds.

Fishermen must eat, and well—and groceries and provisions accounted for approximately 4% of the yearly trip expenses of the six boats. Judging by these figures, outfitting a tuna boat with provisions for a long voyage is a task of major proportions, dollar-wise.

Also impressive is the amount required to keep the six boats stocked with engineroom and deck supplies for a year's fishing: filters, tools, squids, netting, ammonia, gauges, paints, etc. and all other equipment necessary to keep all mechanical parts of the clipper in good running condition—3% of the gross. All of this item is not charged to the trip. There are certain items the cost of which is charged by the crew and the boat; the remaining items are paid for by the boat's owners. Such items as paint, spare parts for machinery, tools, etc. are paid for by the owners.

Licenses and permits represent a rough 3% of the gross; crew shares, 31%.

• *STAKE IS LARGE*—In giving the following figure, it must be emphasized that the estimated total income of the 170-boat fleet does not take into consideration the varying size or tonnage capacity of the various tuna clippers. It is given for one reason only, to present an approximation of what the California tuna bait boat fleet has at stake in the industry. Using a figure of 170 boat-fleet, and taking the gross income of the six boats as an average, we secure a figure of $40,856,100 as the gross income for the bait fleet in 1953.

It is apparent, then, that any slackening in operations of California's long-range high seas bait fleet would indeed mean a great dollar loss to service and equipment suppliers, to foreign countries from whom licenses are secured, etc.

To further emphasize the value of tuna industry afloat, consider the cost of building the two new tuna clippers now under construction for the Soares brothers at San Diego—a cost conservatively estimated at half a million dollars each.

Owners and crews of the refrigerated tuna bait fleet have, indeed, a large investment to protect. Canners, paying $40,000,000 a year, roughly, for raw tuna caught by the California bait fleet, also have an investment in a resource they must conserve and protect, to insure a steady and adequate supply of the food fish which is becoming increasingly popular on the American menu.

Kliklok License Acquired By Fibreboard Products

Fibreboard Products Inc., with head offices in San Francisco, California, announces that they have entered into a license agreement with the Kliklok Corporation, New York, N. Y., which will give Fibreboard the right to sub-lease Kliklok Box Forming equipment and to supply cartons for use on Kliklok equipment.

STARR NETS

Nylon Netting for commercial fishing has proven its advantages—longer wearing, no preservatives, sharper fishing, etc. Important, too, is the reputation and skill of the manufacturer who processes the nylon fibers into netting. That's where Starr, leaders in commercial fish netting for over 60 years, prove again that experience and know-how make for a quality product. Starr, one of the originators in the development of Nylon Netting, and volume producers since its inception, offers you netting made from 100% Du Pont Nylon and features the famous Starrlock Knot — extra protection against knot slippage.

Fishermen who fish for profit fish with Starr Nylon Netting.

Stocked and Distributed by

CONSOLIDATED NET & TWINE COMPANY

Fisherman's Terminal, Seattle 99, Wash., Tel. Alder 6387

STARR NETTING—STAR PERFORMANCE

Write for prices on cotton, linen and Nylon (made from Bonded Nylock twine) netting.

A. M. STARR NET CO.
EAST HAMPTON · · · CONN.

STOP EXPENSIVE HAULOUTS!

Conventional bottom paints can't give you the longer-lasting fouling resistance of "TRADEWINDS" Anti-Fouling. Bottoms protected with this highly-toxic Woolsey formula *remain clean*...and this remarkably efficient repellent also insures excellent slip and smoothness. Repaint with "TRADEWINDS" and forget that mid-season haulout.

SERVING AT SEA SINCE 1853
WOOLSEY MARINE PAINTS ®

C. A. Woolsey Paint & Color Co. Inc., 229 East 42nd St., N.Y. 17, N.Y.
Chiles Boat Co., 11333 Atlantic Blvd. ..... Lynwood, Calif.
Oregon Marine Supply Company, 235 S.W. First Ave. Portland 4, Oregon
Pacific Marine Supply Company, 1217-1223 Western Ave. Seattle, Wash.
San Diego Marine Hardware, 1520 India Street San Diego, California
Weeks-Howe-Emerson Company, 255 Mission Street San Francisco 5, Calif.

BATTERY CHARGERS
by Universal mean dependability

• 6, 12, 32 volts • Compact design • gasoline engine powered • air or water cooled • all capacities • *all Lowest Priced* • also A.C. Electric Plants

Literature on request • Write:

UNIVERSAL MOTOR COMPANY
423 Universal Drive • Oshkosh, Wisconsin

World's Largest Builders of 100% Marine Motors

Seattle: Pacific Marine Supply Co. - San Francisco: Thomas A. Short Co.
Los Angeles and San Diego: Shepherd Marine - Honolulu: McWayne Marine Supply Co. - Prince Rupert and Victoria: Edward Lipsett, Ltd.
Vancouver: Lipsett Engine & Mfg. Co. Ltd.
Coos Bay, Oregon: Elfving's Marine & Builders Supply
Portland: Lee McCuddy's Columbia Marina

NOW Money-Saving Accuracy of LORAN Navigation Within Reach of All Commercial Fishermen...

WITH THE NEW

EDO *Direct-Reading* LORAN

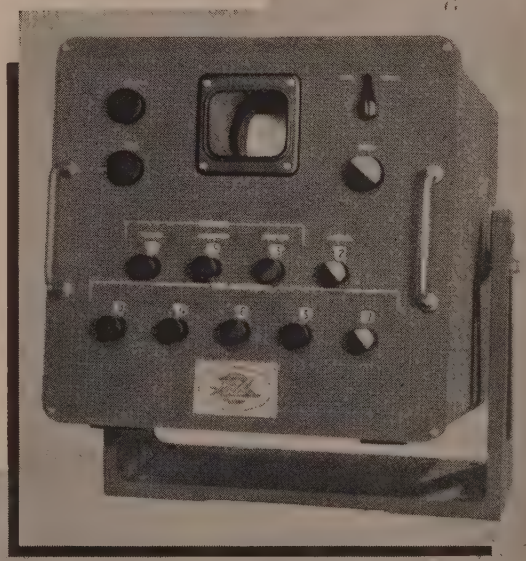
Now, Edo, a recognized leader in marine electronic development, announces a new Loran at a practical price. Built to the highest electronic standards, the Edo Loran gives quick, directly-read time difference readings for accurate plots in a matter of seconds. No calculations, no computations, no tables, no special training needed to operate.

Edo has achieved a practical low price for its new Loran with no compromise in quality by applying the most advanced electronics circuitry. For instance there are less than half the number of tubes in the Edo Loran (only 26) than in any other currently available equipment. This at no sacrifice in accuracy and with the advantage of lower power requirements, easier maintenance, and greater dependability.

Features of the Edo Model 262 Loran

- ★ Only 26 tubes including cathode-ray tube and rectifiers.
- ★ Single, compact, light-weight, self-contained unit.
- ★ Low power consumption, 150 watts, 115 volts @ 60 cycles.
- ★ The unit can be mounted on a table, suspended from overhead or bulkhead.
- ★ Large direct reading dials especially illuminated for night use. Recessed CRT requires no hood.
- ★ Delay is not stored and cannot drift.

SEND FOR THE NEW BROCHURE ON THE EDO MODEL 262 LORAN.



Edo CORPORATION College Point, L. I., N. Y. SINCE 1925

All Along the Coast

THE **ENGINE DIVISION** OF
NATIONAL SUPPLY
SELLS AND SERVICES

CHRYSLER
MARINE ENGINES

At convenient locations, National Supply stocks a complete line of genuine Chrysler parts. Many coastal canneries also keep emergency repair parts, available at a moment's notice.

Keep your engines humming with our modern repair and overhaul facilities. Consult us about your new marine power needs.

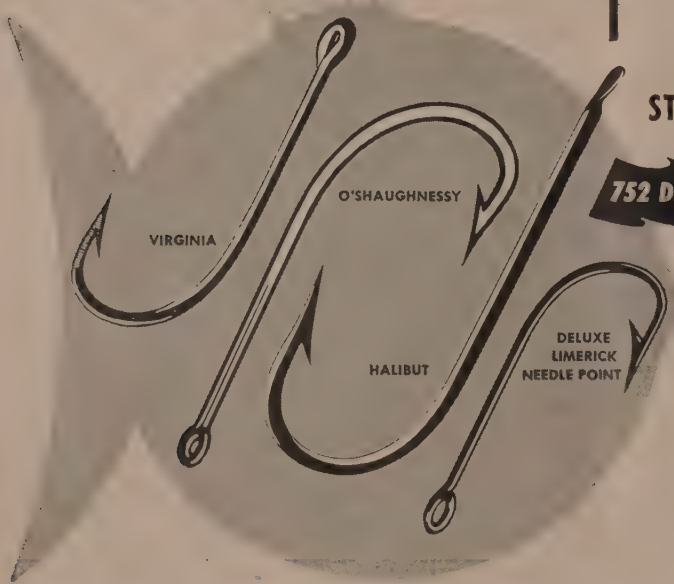
A complete line of Chrysler, Superior and Atlas engines in sizes and HP to meet your requirements are available from The National Supply Company's Engine Division.

ENGINE DIVISION
THE NATIONAL SUPPLY COMPANY
PLANT AND GENERAL SALES OFFICES: SPRINGFIELD, OHIO

Sales and Service Offices: Astoria, Oregon, 131 Seventh Street, P.O. Box 57; Halifax, Nova Scotia, Canada, 76 Upper Water Street; Ketchikan, Alaska, 900 Water Street, P.O. Box 2021; Portland 14, Oregon, 237 S.E. Union Avenue; Seattle 99, Washington, Salmon Bay Terminal; Vancouver, B.C., Canada, 1845 West Georgia Street.

Distributors of Lister Diesels in the U. S. A.

PFLUEGER HOOKS



STANDARD OF FISHERMEN EVERYWHERE

752 DIFFERENT TYPES AND SIZES REGULARLY STOCKED

You can depend on Pflueger Hooks to give long service. They're made of the toughest steel, finely tempered to hold shape and finish. Made in U.S.A. by third generation of Pfluegers. Demand Pflueger hooks and you'll catch more fish.

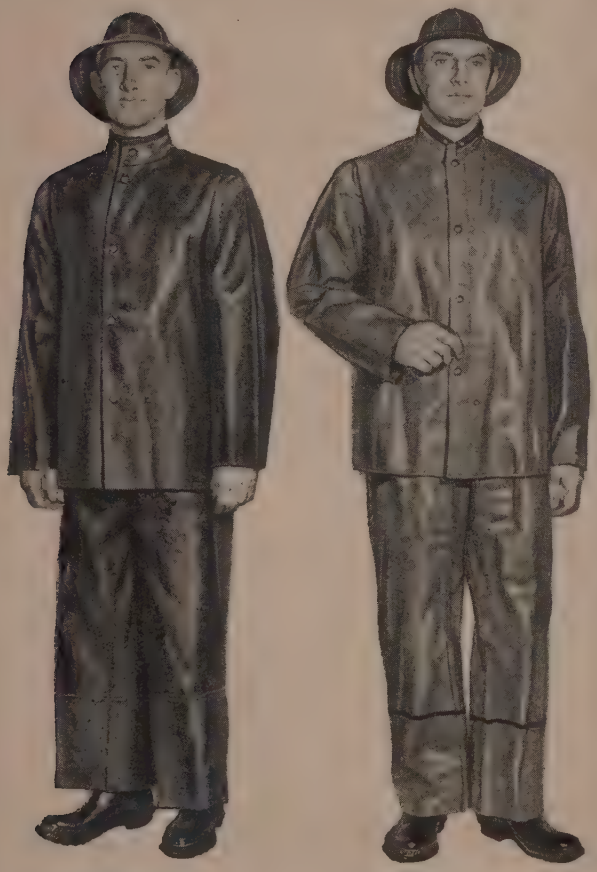
THE ENTERPRISE MANUFACTURING CO., AKRON, OHIO
90 YEARS OF MAKING FINE TACKLE

PFLUEGER (Pronounced "FLEW-GER") MADE IN U.S.A. — A GREAT NAME IN TACKLE

When you ship green water

...KEEP DRY

U. S. Rubber Raynster workmanship means built-in dryness. Rubber compounds provide greater resistance to abrasions, sun and cold.



U. S. RUFF-N-TUFF EUREKA SUIT

• inside fly front • corduroy-tipped collar • rust-resistant ball and socket fasteners • underarm ventilation • overalls: elastic suspenders • cut-off band permits shortening, won't curl or ravel.

BLACK EUREKA BOOT

• duck-lined, shockproof, thigh-high...for maximum comfort.

U. S. PEERLESS NEOPRENE SUIT

• Neoprene outside, inside • resists acids, oils • corduroy-tipped collar • rust-resistant ball and socket fasteners • overalls: bib front, adjustable suspenders, cut-off band permits shortening without curling or raveling.

U. S. SQUAM HAT

• reinforced water-shed brim.

SOLD ONLY THROUGH INDUSTRIAL AND RETAIL STORES

U. S. INDUSTRIAL RAYNSTERS®
U. S. ROYAL RUBBER FOOTWEAR

US RUBBER

UNITED STATES RUBBER COMPANY

Permanent hull surface in 4 hours!

woven from pure

FIBERGLAS* YARN

Easy to apply — **Bonds permanently to hull**
Lasts indefinitely — **Tough, resilient**
No maintenance — **Unaffected by rot, growths**
Impervious to water, oil, gas

Now, give your boat's hull a new surface that will last the boat's lifetime! It's easy with new Trevarno Glass Boat Fabric—the perfect finish for wood hull boats! Trevarno Fabrics have a tensile strength greater than steel. And, being glass, they are virtually everlasting! This tough covering helps protect your boat hull from scuffing, leakage and fracture during *years* of normal use. Unpainted, Trevarno Fabrics let natural wood grains show through—retaining the beauty of wood surfaces.

EASY TO APPLY AS PAINT

Paint resin and hardener on clean, dry hull.

Apply second coat of resin and hardener.

Smooth on Trevarno Fabric.

Sand lightly and paint or leave natural.

2738

DECKS, CABIN TOPS TOO! Trevarno Boat Fabrics provide a permanent bonded surface that protects decks and cabin tops from leakage, scuffing or damage from sea and sun.

Trevarno
GLASS FABRICS

*T. M. Reg.

Ask your Boat Supply Dealer, or write

COAST MANUFACTURING & SUPPLY CO.
BOX 71F, LIVERMORE, CALIFORNIA

"North American" Wrecked and Lost On Pt. Loma Rocks

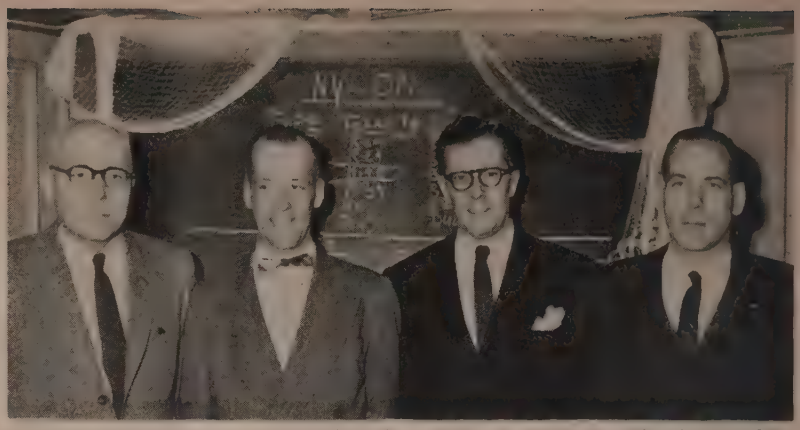
Sverre Jangaard, one of the most able tuna fishermen of the San Diego fleet, has lost his *North American*. He had turned the command of the boat to another for the trip, and on the return, loaded with tuna, she went aground on the rocks off Point Loma, only a short distance from the Van Camp docks where the tuna would have been unloaded.

As this issue of *PFN* went to press, it was understood that most of the cargo was removed before the vessel was abandoned as a total loss.

North American, which was notable because of her contribution to experimental long-line fishing in the Christmas Islands area of the Mid-Pacific early in 1954, was built in 1944 by the Tacoma Boat Building Co.

The tuna fleet has lost in this vessel cargo potential of 100 tons.

Chicken of the Sea tuna is teamed with **Kraft** dinner in four-color, full-page newspaper advertising in October and November.



Synthetic Fiber Specialists at the Consolidated Net & Twine Co. "Netting Clinic" in Seattle in November; from left, Robert J. Starr, president, A. M. Starr Net Co.; Robert Stewart, president of CoNetco; O. E. Butcher, vice president, William Kenyon & Sons, Ltd.; N. C. Brownell, vice president, Brownell & Co., Inc.

Use of Synthetic Fibres Fishing "Clinic's" Topic

To acquaint operators and superintendents of the salmon industry with the specialized uses of nylon and dacron in gillnets and seines, Robert Stewart of Consolidated Net & Twine Co., Inc., Seattle, arranged a three-day "clinic" at Seattle early in November, with three of the leading experts in this field on hand to discuss the topic generally with the industry representatives.

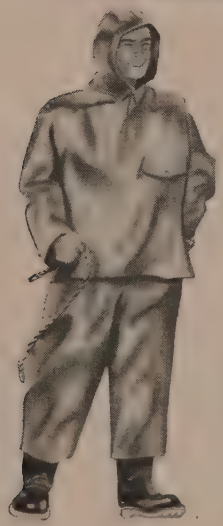
The "clinics" were attended by full representation of the Bristol Bay industry, together with numerous operators from other districts where gillnets and setnets are important factors in fishing.

The three specialists, their companies—which are represented by CoNetco—and the subjects they handled were: O. E. Butcher, vice president, William Kenyon & Sons, Ltd., nylon rope; N. C. Brownell, vice president, Brownell & Co., Inc., nylon and dacron twine; Robert J. Starr, president, A. M. Starr Net Co., nylon gillnetting and dacron seine web.

The meeting also served as an opportunity for Mr. Stewart to introduce to the industry a widely known former cannery superintendent who is now associated with Consolidated Net & Twine's sales department, Douglas K. Sherriff.

Operating men of the salmon industry showed a great deal of interest in the synthetics and the economics of their employment. The possibilities in identification marking of the nets; of the fishermen dyeing the nets to their own ideas; and of the ability to manufacture the twine with any required amount of stretch were subjects in which particular interest was manifest.

TOWER'S
"FISH BRAND" NEOPRENE



Never before have waterproofs afforded the protection given fishermen by

TOWER'S NEOPRENE
HOODED SHIRTS and PANTS

In addition to providing solid comfort, roominess, and durability, **TOWER'S NEOPRENE** waterproofs give special protection against oils, greases and ordinary acids. Hoods attachable to regular jackets may be purchased separately if desired.

For those not requiring the extra protection given by Neoprene treatment we suggest **TOWER'S "FISH BRAND"** oiled or **"ARROW BRAND"** rubber garments. Styles available include jackets, pants, hooded shirts, coats, aprons, sleeves and hats. All good dealers carry these items or can get them for you.

For folder of styles and detailed information write Department **PF.**

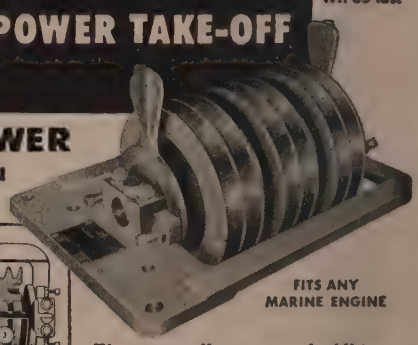
NEOPRENE RUBBER

TOWER'S FISH BRAND
A. J. TOWER CO.
74 SIMMONS ST. BOSTON, MASS.
TOWER'S ARROW BRAND

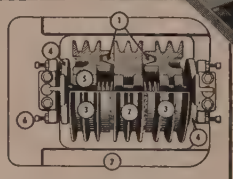
The New ALBINA DIRECT CONTROL POWER TAKE-OFF

Double Belt Model
Wt. 35 lbs.

PUTS POWER
Where you need it!



FITS ANY MARINE ENGINE



1. Cone clutches.
2. Pulley driven from engine crankshaft.
3. Clutch pulley (independently controlled).
4. Control Levers
5. Sealed ball bearings (no lubrication necessary).
6. Adjusting screws.
7. Mounting frame.

The manually operated Albina Power Take-Off now has die cast operating levers of Aluminum-Zinc copper alloy with a stainless steel wearing strip cast as an integral part. There are also die cast aluminum alloy sheaves and die cast aluminum alloy shaft standards. Full molded friction linings from permanent molds. The shaft is stainless steel. SKF bearings are permanently lubricated and sealed.

Write for illustrated descriptive folder.

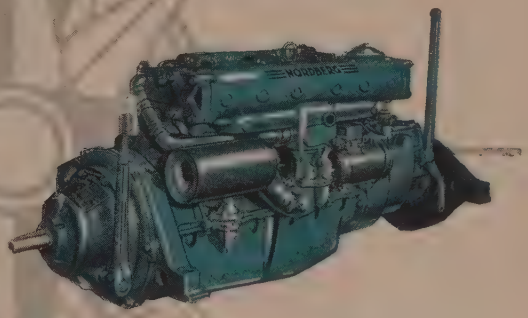
ALBINA ENGINE & MACHINE WKS.
2100 N. Albina Ave. Portland, Oregon

"KNIGHT" . . . 155 HORSEPOWER at 3200 rpm; Six Cylinders; 340 cu. in. Displacement.

"TARPON" . . . 130 HORSEPOWER at 3000 rpm; Six Cylinders; 320 cu. in. Displacement.

"BULLET" . . . 110 HORSEPOWER at 3400 rpm; Six Cylinders; 236.7 cu. in. Displacement.

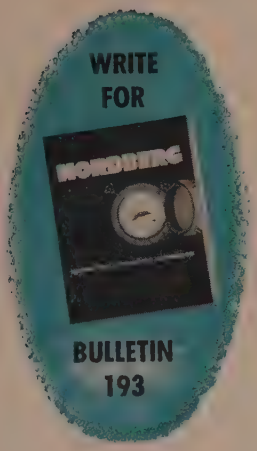
Specify NORDBERG GASOLINE MARINE ENGINES for Dependable Economical Fishing Service



"BLUEFIN" . . . 95 HORSEPOWER at 3200 rpm; Six Cylinders; 230 cu. in. Displacement.

"ARROW" . . . 95 HORSEPOWER at 3200 rpm; Six Cylinders; 230 cu. in. Displacement.

"MARLIN" . . . 110 HORSEPOWER at 2500 rpm; Six Cylinders; 320 cu. in. Displacement.



NORDBERG MFG. CO., *Milwaukee 1, Wisconsin*

NORDBERG
GASOLINE MARINE ENGINES

MAIL THIS COUPON NOW

NORDBERG MFG. CO., PF
Milwaukee 1, Wis.

Please send literature describing Nordberg Gasoline Marine Engines.

Name_____

Address_____

City_____ Zone____ State_____

★ SELLING & BUYING ★

10c a word per time, $3.50 minimum. (For box numbers addressed to PFN, add $1.00.) Business card display—$16.50 per column in. per insertion, with lower rates on contract basis. Mail all copy to PACIFIC FISHERMAN'S NEWS, 71 Columbia St., Seattle 4, Washington.

FOR SALE: 51' No. Troller, '47, Atlas Imperial, 6 cyl. Trolling Aux. 25 Ton, 50 Watt Radio, R.D.F. Winch & Gurdies $15,500. 38' Diesel Kettenburg, New Petter Aux. 12 Ton Refrigeration, Fathometer, 40 Watt Collins W. F. Pilot, R.D.F., Bait Net, Skiff, $10,500. 50' Commercial Fantail, '48 165 H. P. G.M.C. Sleep 6, 15 Ton, $9,000. 60' Commercial, Atlas 75, 100 Watt Radio, W. F. Pilot, Fisher R.D.F., Fathometer, 20 Ton Tuna $8,500. FRANK SIMON ASSOCIATES, P. O. Box 834, Berth 205A, Wilmington, Calif. TE 5-3101.

FOR SALE: The famous boat "Petrel", a Norwegian double ender 42' x 11'9" x 5'9" equipped for salmon or tuna. Write Lester E. Parker, 3050 S. W. West Slope Drive, Portland 1, Oregon. Phone CY 2-1250.

BUY Surplus boats, marine engines, equipment from Government. Send $1.00 for Government Surplus Bulletin, Box G213, East Hartford 8, Conn.

AVAILABLE—Man extremely well versed in Pacific Coast, Alaska, and tropical fisheries of Central Pacific. Technical and engineering education and practical background in refrigeration, cannery construction and operation. Family, late 30s, excellent health, willing to work in remote areas. Desires permanent connection. Box 272, PACIFIC FISHERMAN'S NEWS, 71 Columbia St., Seattle 4, Wash.

FOR SALE — Loran equipment, $170 complete. Ready for installation. Excellent electrical condition, new inverters. Each set has been completely checked and tested. F. O. Steele, 2725 Van Ness Ave., San Francisco, Calif. Phone: PRospect 6-1016.

FOR SALE: Troller "Sea Pal" 32 x 10 x 3.6 Kettenburg. Built 1944. New GMC 4-51 Diesel. Equipped with Ship to Shore Phone. Refrigeration. Iron Mike. Auxiliary, net gurdie, also ideal for salmon and crab fishing. Price $7500. Oscar Ness, 304 W. 4th St., San Pedro, Calif.

WANTED: Northern Troller. Send description, cash price and photo to Ed Worack, 661 21st St., Richmond, Calif.

FOR SALE: Chrysler Royal engines, 8 cylinder, 141 HP—new. Priced for quick sale. SHERMAN SUPPLY CO., 2456 - 1st Ave. So., Seattle. SEneca 0061 or MAin 4802.

FISHING BOATS FOR SALE: Trollers and Monterey Purse Seiners. DON WOODWARD, Boat and Real Estate Broker, at Marine Supply Store, PO Box 45-A, MOSS LANDING, Calif. Telephone, CASTROVILLE 6652.

WANTED TO LEASE with option to buy. Troller in first class shape (45 ft. to 55 ft.), fairly new for 1955 Season. Please notify William Wise, 1918 B Street, Forest Grove, Oregon.

FOR SALE: Atlas Diesel engine 9872. Marine. 45 hp. 3 cyl. 6½ by 8½. C-6484. Mrs. Jenny Sweins, 1716 H St., Eureka, Calif.

FOR SALE: New 40'x11'3"x5'6" Monk-designed troller hull; similar to M & I, DAWN and DING HOW. Complete with tanks, bow iron and rudder. Tripple & Everett Marine Ways, Inc., 1636 West Spokane Street, Seattle 6, Wash. Phone AValon 3381.

FOR SALE: M/V Nestucca, Monk-designed 55.6 x 15.8 x 7 combination dragger, albacore or suitable for seining. New GM 6-110 175 h.p. main engine; 15 h.p. Buda auxiliary both diesel. Freon refrigerated hold. Rowe Northern Dragger winch 400 fathom cable. Completely equipped for dragging and tuna fishing plus bait fishing equipment. Equipped with two way radio, iron mike, direction finder, and loran. Olympic oil range and 32 volt refrigerator in galley. Write A. J. Conger, Jr., 599 Miller Lane, Astoria, Oregon. Phone: 237 J Astoria.

FOR SALE: "Anna E" 43' x 12'6" x 5. 671 GMC diesel. Crab and trolling gurdies. Iron mike, two way radio and fathometer. Built 1947. Price $15,000. Write Joe Fogarty, 334 Harbor Dr., Newport, Ore. Phone 581W.

COMMERCIAL FISHERMEN
In Mexican-Central American Waters
PACIFIC TOWBOAT & SALVAGE CO.
Offers Standby Salvage and Towing Service
Pier "C", Berth 20 Long Beach 70-6487
Long Beach 2, Calif. Cable Address: PACTOW
"KANAK"—WA 6710

DOC FREEMAN'S
MARINE ENGINES EQUIPMENT HARDWARE
New Onan, 12 volt 30 amp. light plant, electric start, gas tank and spare parts $110. 17 amp. 12-volt generators $20. 35 amp. 12-volt generators $45. Chrysler parts, light plants, propellers, hardware.
999 Northlake Ave. EV 1500 Seattle

A name fishermen have trusted for more than 30 years
AL LARSON BOAT SHOP
General Machine Repair Work
Boat Builders
Terminal Island, Calif. TE 2-4521

FORSTER
SHIP BUILDING CO., INC.
SHIP BUILDERS — ENGINEERS
MARINE WAYS — REPAIRS
Foot of Ferry St. Terminal Island
Phone TE 2-4527

FISH
- PROCESSING
- CANNING
- REDUCTION
- EQUIPMENT

Domestic & Export Sales
BERGLUND SALES & ENGINEERING CO.
112 Market St. San Francisco
Phone: Yukon 6-2340

LAST CHANCE!
They're Getting Scarce!
Surplus Graymarine (GM) 6-71 diesel engines. Reconditioned, modernized, with wide range of reduction ratios. Fully guaranteed.
COMPLETE STOCK OF PARTS
HALL-YOUNG CO.
366 Jefferson St., San Francisco
Fishermen's Wharf
Phone: PRospect 6-5520

Adams American Netting Tubbs Cordage
Pabco Marine Paints
A. D'ACQUISTO & SONS
FISHERMEN'S SUPPLIES
COMPLETE TROLLING EQUIPMENT
Phone: 2-4110
Municipal Wharf, Monterey, Calif.

In Southern California
NORDBERG GAS ENGINES
H. G. McKINNEY & CO.
Berth 192 TErminal 4-1473
Wilmington, Calif.

Cincotta Bros. Handle New BJ Marine Rubber Bearings

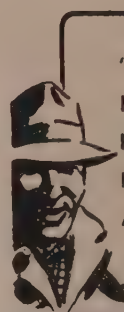
Cincotta Bros., San Francisco and Monterey fishermen's supply and equipment house, are the northern California distributor for the new BJ water lubricated marine bearings, manufactured by Byron Jackson Co., according to Tony Cincotta, owner of Cincotta Bros.

In BJ marine bearings the long-life resilient molded rubber lining is bonded to a heavy brass case, and no change in strut or stern casting size is required to accommodate the BJ bearing, according to Mr. Cincotta. The bearing will support heavy loads, noise and vibration are reduced, and longer life for shaft and bearing is claimed.

Denver District Entry Set-Up by Fibreboard

T. N. Bland, President, Fibreboard Products Inc., with head offices in San Francisco, announced today that the company has purchased fourteen acres of property in the southern part of the city of Denver, Colorado, from the Santa Fe Railway as the site for a new carton plant. Construction will start immediately.

CHRIS-CRAFT ENGINES
MICHIGAN WHEELS
APELCO
DIRECTION FINDERS
BRYANT'S Marina
1117 E. NORTHLAKE ME 0090
SEATTLE


"IMPORTANT TO FISHERMEN — PARTS FOR WASHINGTON DIESELS ARE ALWAYS AVAILABLE"
WASHINGTON DIESEL

SEASIDE
SUPPLY STORES, INC.
Complete Stock of
Commercial Fishing Supplies
ADAMS NETTING
Make our store your Headquarters in SAN PEDRO
803 S. Palos Verdes TE. 2-7297
SAN PEDRO, CALIF.

GM DIESEL POWER
General Motors
Installations
SALES - SERVICE
SHORE LINE DIESEL
MAINTENANCE
Pier 47, Ft. of Jones St., San Francisco
Phone: Graystone 4-2873

LINES and LEADERS

Edo's New Low-Cost Loran Designed For Fishermen's Needs

Development of a new low-cost direct-reading Loran has been announced by the Edo Corporation of College Point, Long Island, New York, manufacturers of a wide range of marine electronic equipment.

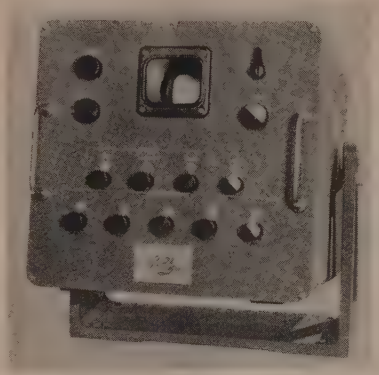
The new navigation device was developed by Edo to provide new, modern Loran equipment in the lower cost bracket, to replace the war surplus equipment which is now obsolescent, and which requires considerable calculation, and interpolation to get position information.

At its relatively low cost, the Edo development makes it practical and possible for Loran to be installed on many types of commercial vessels. Fishermen use it extensively and accurately to find good fishing grounds.

The lowered cost was achieved through the use of advanced electronic circuitry. This has resulted in a single-unit equipment with only 26 tubes while other currently available lorans have more than twice that many. This has greatly reduced manufacturing costs, results in a much lighter, simpler equipment.

The Edo Loran unit, including a mounting yoke, weighs a total of 90 pounds. It is equipped with an adjustable mounting bracket for installation on table, bulkhead, shelf or overhead. It is completely self-contained and uses the ship's regular radio-telephone antenna. Power requirements are 150 watts at 115 volts, 60 cps, about half that required by other loran units.

The operation of the Edo Loran is extremely simple and requires no training of any kind. Time difference figures from which lines of position are determined are read directly from the face of the equipment. No computations of any kind are required and no tables need be consulted. The navigator can take readings on two stations in a matter of seconds.



New Edo Loran is a low-cost instrument specially suited to the navigation and particularly the fishing needs of commercial fishing craft.

A. W. OSTRANDER becomes general sales manager for Enterprise engines and process equipment.

Enterprise Engine Firm Picks Two New Top Executives

Wm. E. Butts, president of General Metals Corporation, recently announced in San Francisco appointment of Wm. Clausen as executive vice president of that firm and general manager of its Enterprise Engine & Machinery Division.

Mr. Clausen was vice president and general manager of Sangamo Electric Company, Ltd. of Canada, with headquarters in Toronto, Canada. Prior to his connection with this heavy electrical equipment manufacturer, he held top management positions with other leading capital goods manufacturing companies.

Mr. Clausen in turn announced appointment of Arthur W. Ostrander to the post of general sales manager of the Enterprise Engine and Machinery Division.

Mr. Ostrander's appointment is an important part of the company's major expansion program.

WM. CLAUSEN, new general manager of Enterprise Engine & Equipment Division of General Metals Co.

ADVERTISING INDEX

Albina Engine & Mchne. Wks. 50
American Marine Paint Co. 26
Berglund Sales & Engr. Co. 52
Brownell & Co., Inc. 37
Brush Aboe, Inc. 28
Bryant's Marina 52
Classified Advertising 52
Coast Mfg. & Supply Co. 49
Consolidated Net & Twine Co. 37, 46
D'Acquisto & Sons, A. 52
Dupont de Nemours Co., E. I., Nylon 32
Edo Corp. 47
Enterprise Eng. & Mchny Co., Marine Diesels 54
Enterprise Mfg. Co. 48
Fish Net & Twine Co. 29
Forster Shipbldg. Co. 52
Freeman, Doc 52
Freeman, Wood 53
Hall-Young Co. 52
Harbor Boatbldg. Co. 53
Heminway & Bartlett Mfg. Co. 42
Industrial & Marine Engines, Inc. 41
Keystone Batteries, Inc. 35
Larson Boat Shop, Al 52
Linen Thread Co. 44
Marine Products Co., Pumps 41
McKinney Co., H. C. 52, 53
Merchants Refrigerating Co. 30
Metal Marine Pilot 53
Murphy Diesel Co. 24
National Supply Co. 48
N C Marine 35
Nordberg Mfg. Co. 51
Nordby Supply Co. 35
Pacific Towboat & Salvage Co. 52
Plymouth Cordage Co. 38, 39
Rudd & Cummings 41
Seaside Supply Stores 52
Shore Line Diesel Maintenance 52
Standard Oil Co. 40
Starr Net Co., A. M. 46
Sudbury Laboratory 31
Tacoma Boatbldg. Co. 34
Tower Co., A. J. 50
Union Oil Co. 36
U. S. Rubber Co., Industrial Clothing 49
Universal Motor Co. 46
Washington Iron Works 52
White & Sons, Wilfrid O. 26
Woolsey Paint & Color Co. 46

METAL MARINE PILOT

for True-Course Automatic Steering

Price

$300

F. O. B. Tacoma

Manufactured by

Wood Freeman

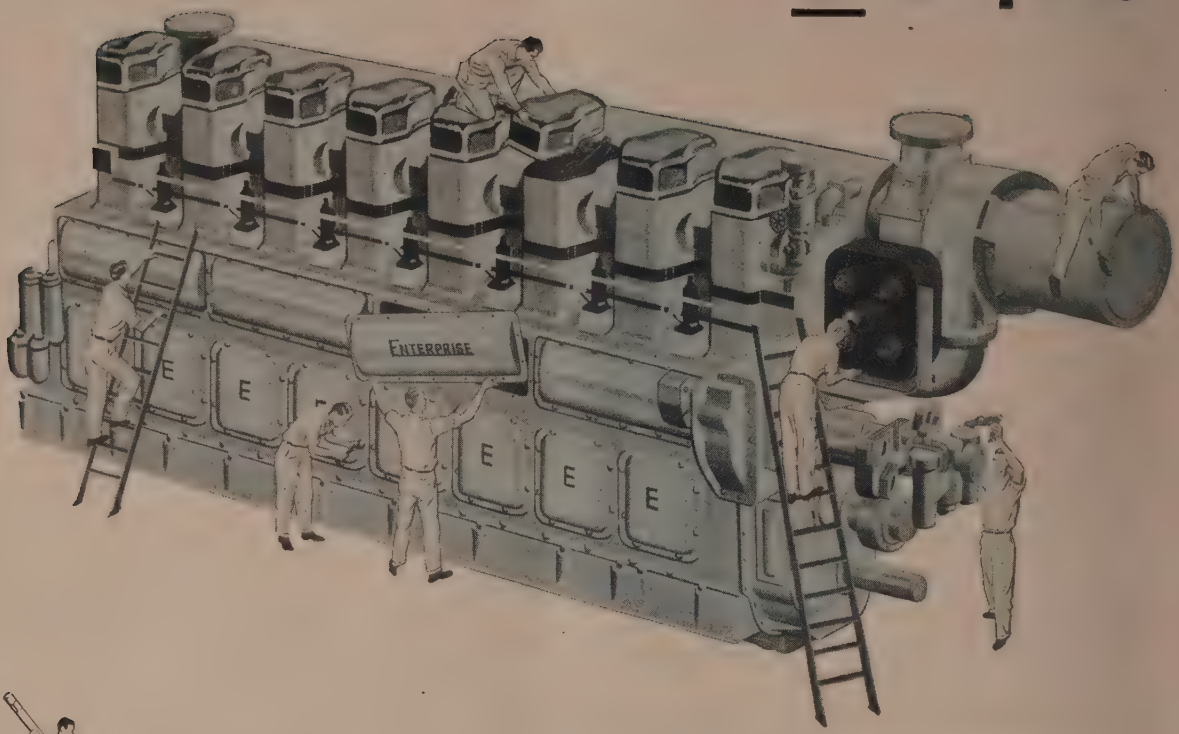
342 Golden Gate Ave., Fircrest
Tacoma 3, Washington
Phone PRoctor 2791

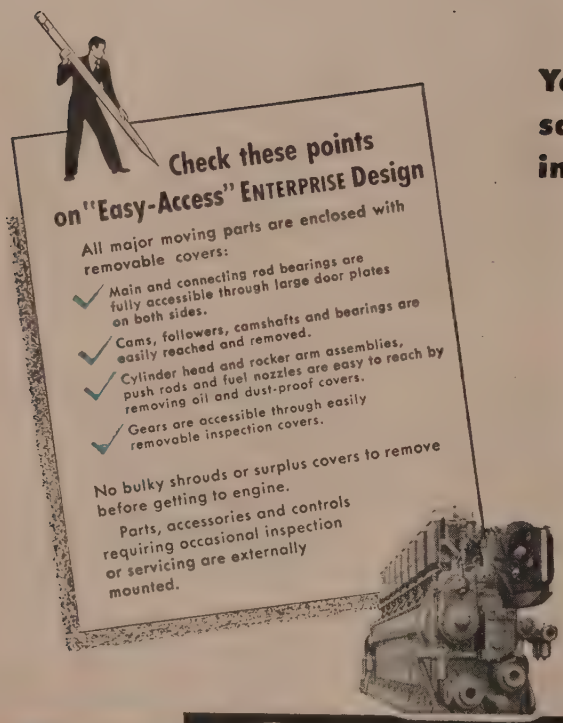
THE FISHERMAN'S YARD

24-HOUR SERVICE • REPAIRS
1000-Ton Drydock • Marine Railways Complete Shops
HARBOR BOAT BUILDING CO.
Fish Harbor — Terminal Island, California

In Southern California
CHRIS-CRAFT
MARINE ENGINES
H. G. McKINNEY & CO.
Berth 192 TErminal 4-1473
Wilmington, Calif.

It's easy to get to all the parts




Check these points
on "Easy-Access" ENTERPRISE Design
All major moving parts are enclosed with removable covers:
Main and connecting rod bearings are fully accessible through large door plates on both sides.
Cams, followers, camshafts and bearings are easily reached and removed.
Cylinder head and rocker arm assemblies, push rods and fuel nozzles are easy to reach by removing oil and dust-proof covers.
Gears are accessible through easily removable inspection covers.
No bulky shrouds or surplus covers to remove before getting to engine.
Parts, accessories and controls requiring occasional inspection or servicing are externally mounted.

You'll find that ENTERPRISE accessibility saves time, money and manpower in maintenance and overhaul

Ever watch precious hours slip by trying to find a way to dismantle, inspect or replace an engine part or assembly? Such unnecessary and costly down-time is something you don't have to worry about with modern, "easy-access" ENTERPRISE DIESELS. For ENTERPRISE service-wise engineers have designed every model in the entire 73 to 2284 HP line for maximum accessibility and easy, low-cost servicing. That's why we say—and mean—you'll have less down-time if it's powered by an ENTERPRISE Dependable Diesel!

Write for description bulletins, or call your nearest ENTERPRISE *Diesel sales office.*

Enterprise DEPENDABLE Engines

ENTERPRISE ENGINE & MACHINERY CO.

18th & Florida Streets, San Francisco 10, California

A SUBSIDIARY OF GENERAL METALS CORPORATION

Boston · Chicago · Denver · Jacksonville · Kansas City · Los Angeles
Minneapolis · New Orleans · New York · San Diego · San Francisco
Seattle · St. Louis · Washington, D. C.

DIESEL ENGINES • OIL BURNERS • PROCESS MACHINERY

HE BUYS—Glenn Copeland has been put in charge of all purchasing—including fish—for Van Camp Sea Food Co.

Glenn Copeland Handles All Van Camp Purchasing

Further changes in management were announced in mid-October by the Van Camp Sea Food Co., Terminal Island. Glenn Copeland, formerly manager of the San Diego plant, becomes director of all purchasing for the company. Wm. J. Gillis continues on in his capacity as production manager.

Clarence Harris becomes sales manager. Malcolm J. Goldie's appointment as director of sales was announced in the last issue of *Pacific Fisherman*. Von Robinson has been appointed personnel manager.

Wilson Smithers Joins Booth Fisheries Staff

Booth Fisheries Corporation has appointed Wilson Smithers as manager of Booth's Chicago wholesale branch.

Mr. Smithers will replace Godfrey Holm, who has been with Booth for the past 41 years, 25 of which he served as Manager of the Chicago Wholesale Branch. Mr. Holm will remain in the employ of Booth Fisheries but due to ill health will be assigned less exacting duties.

Mr. Smithers was a former employee of Booth Fisheries, having served in various capacities from 1921 to 1933, when he resigned to assume the presidency of Robbins Co., Inc., an American subsidiary of British-Columbia Packers, Ltd. He subsequently resigned from that office to assume an executive position with Shapiro Fisheries of Chicago.

California Canned Tuna Pack—August, 1954

(In cases of 48 cans, except as indicated.)

White Meat Tuna	Solid Pack	Standard Pack	Chunks	Grated, Flakes	Dark & Light	Tonno	Total
1-lb.	353	....	....	....	....	....	353
½-lb.	162,801	3,954	55,043	59,884	960	24	282,666
¼-lb.	15,266	....	7,754	....	....	....	23,020
Lightmeat Tuna							
4-lb. 12s	113	....	3,101	....	....	....	3,214
1-lb.	137	....	812	310	....	....	1,259
½-lb.	98,248	37,273	355,824	70,633	4,918	5,142	572,038
¼-lb	5,273	758	13,291	....	....	9,436*	28,758
Bonito							
½-lb.	....	101	....	2,004	....	....	2,105
Yellowtail							
½-lb.	....	....	....	85	....	....	85
Totals	282,191	42,086	435,825	132,916	5,878	14,602	913,498

*¼-lb. 100s.

There'll Be Tuna Enough—
But In-Clipper Inventory Shrinks

The California tuna industry in November was prepared to furnish the American home with an ample supply of tuna for the remainder of 1954 and the early months of 1955, the latter being those months in which tuna production is relatively small.

October's tonnage was down from that of October, 1953, but the first nine months of California production ran above that of 1953 and included imports for canning.

It is estimated that about 7,000 tons of tuna were being held aboard clippers at San Diego, a considerable reduction, however, from the estimate of 11,000 tons early in October. Van Camp Sea Food Co., Terminal Island, reported that it had unloaded all purse seiners there, and that there were no Van Camp seiners at sea as this issue went to press.

The bait boats, however, at San Diego were clearing port just as soon as they were unloaded, hoping for another completed trip before the end of the year. The first week of October, 12 boats cleared San Diego. During the first three weeks of October, 39 boats unloaded, and it can be presumed that they left for the tuna grounds almost immediately after unloading. In September, 39 boats cleared San Diego.

It is safe to say that the total tonnage production of 1954 will outdistance that of 1953, and that an estimate can be made of 18,000 tons potential tuna tonnage for November and December, some of which may be delivered after January 1. This would put the 1954 production at a higher round-figure than for 1953.

Canners were faced with the problem of selling more tuna, but they were recognizing the problem by spending a larger amount of money for advertising this abundant production of high-protein fish food.

The first nine months of 1954 produced 7,430,557 cases of tuna, some of which were packed from imports. The first nine months of 1953 produced 6,704,646 cases.

Add to the 1954 first-nine-months figure, the estimate of 363,706 cases, for San Pedro and San Diego in October, and it becomes apparent that the first 10 months of 1954 will record a greater case pack than 1953.

The sales force of the California tuna canneries and their brokers were prepared to move the heavier production and to start 1955 with very little over the normal end-of-the-year inventory.

Monterey Plants Readied For Sardine Resumption

Two more Monterey canneries were prepared to receive fish, as the sardine catch in southern California waters continued to improve.

They were Enterprise Packers, and Ferrante Packing Co. Enterprise has been closed since March, 1953, but Sebastian "Buster" Sollecito, said that he would be ready to go about Nov. 1. He plans to pack sardines if shipments from southern California waters continue; and to can squid, anchovies, and other species, depending on market conditions.

Ferrante Packing Co., formerly Atlantic Coast Fisheries, and before that Sea Pride Packing Co., has not been operated for some time. Head of the company, which took over last year, is Sal Ferrante, formerly president, Oxnard Canners, Inc., Monterey. He plans on packing sardines, squid, anchovies and other species.

SALMON CANNING FERRY—New floating plant moored at Everett as the only floating plant of the Puget Sound resident fleet.

Canning Salmon on a Ferry—

How Gene Scheerer Converted "Rosario" To A Fish and Clam Packing Plant

Newest thing in Puget Sound salmon canneries is a floater, the plant of the Scheerer Canning Co., installed in the retired ferry *Rosario*.

E. C. "Gene" Scheerer had his plant berthed at Everett, Wash., during the summer season, and probably will make that her principal location. He expects to use the plant for canning hardshell clams also, and may possibly shift it nearer the clam supply during that winter operation.

One of the interesting aspects of *Rosario's* conversion to canning was the extraordinary speed with which it was accomplished. Mr. Scheerer had previously operated in the plant of the Everett Fish Co., but with less than a month before the opening of the Puget Sound season decide to equip the ferry he had acquired.

It took a lot of doing, but Mr. Scheerer and his son Bob got it done, and before the end of July they were turning out a substantial pack.

The Scheerer floater is equipped to can quarters, halves and 4-lb. cans. Pack is marketed by Ivar Wendt, Seattle, under his *Pacific Pearl* of the *Scheerer* labels.

The ferry *Rosario,* a veteran of the Puget Sound transportation system, was acquired from the State of Washington, and lends itself handily to cannery service.

FISH RECEIVING is provided for from land as well as water. The plant is equipped with two hoists, one to take fish from seiners or packers lying alongside and the other to lift fish from trucks on the dock to which the cannery is moored. This latter operation can be accomplished only at high tide, with which truck deliveries are timed to coincide.

Once aboard the vessel, the fish are handled in large stainless steel bin trucks which can be moved up to the butchering table, where all fish are hand butchered.

CANNING LINE runs from the bow to the stern of the *Rosario,* along the port side of the vessel. From the butchering table the fish pass to the slimers and then to the gang knife. While the hand-operated type of knife is used on occasion, Bob Scheerer had devised an interesting motor knife in which fish are dropped into the three horizontal pockets of a "star" wheel formed by laminations of waterproof plywood spaced to permit them to pass between the blades of the circular gang knife. The result is an extremely compact power knife which can be converted to slicing for either halves or quarters in a very few minutes.

All filling in the cannery is done by hand, the cans passing close inspection before they enter the American Can Co. closing machines. There are two of these, one handling either halves or quarters, and the other a 4-lbs. seamer.

Retorting takes place in three unusual two-car rectangular retorts. These pressure vessels were originally intended for military service as sterilizers. They are exceptional among cannery retorts in that they are lined with Monel.

BROKER and PACKER—Ivar Wendt, sales agent for Scheerer Canning Co., on the left, and "Gene" Scheerer, head of the company seem partial to the 4-lb. cans in which they specialize.

• ST. LOUIS, MISSOURI • CHICAGO, ILLINOIS • NEW ORLEANS, LOUISIANA • BALTIMORE, MARYLAND •

MOBILE, ALABAMA • SAN DIEGO, SAN FRANCISCO, SAN PEDRO, CALIFORNIA

NORFOLK, VIRGINIA • SEATTLE, WASHINGTON • VANCOUVER, BRITISH COLUMBIA

OSWALD MACHINE WORKS . . . *offers complete parts*

and service for

S-N MARINE GEARS

No matter where you may be, from the Atlantic to the Pacific, you'll usually find an established S-N distributor ready to provide dependable parts and service. They, like hundreds of fleet and boat owners recognize from first hand experience the *reliability, outstanding performance* and *smooth power transmission* of these world famous Snow-Nabstedt Marine Gears. Remember . . . for S-N parts, see your engine distributor first. If he cannot offer immediate service, contact your nearest S-N distributor.

ON THE FINEST MARINE ENGINES 4 TO 1000 H.P.

SNOW-NABSTEDT

Transmission Engineers

FOR NEARLY HALF A CENTURY

THE SNOW-NABSTEDT GEAR CORP., HAMDEN, CONN.

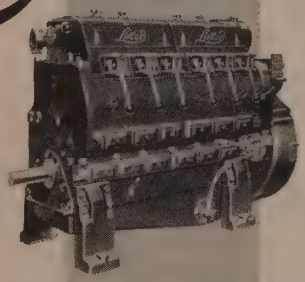
• Charles Oswald, Jr. • Oswald Machine Works — 2936 Hyde Street, San Francisco, California • The "Sea Worthy" powered with Murphy Diesel Model ME-150, 150 H.P. S-N MARINE GEARS Model 3766, 3:1 ratio.

• DETROIT, MICHIGAN • JACKSONVILLE, MIAMI, FLORIDA • PORTLAND, OREGON • HOUSTON, TEXAS •

Lister

DIESELS
provide economical power for all these marine jobs—

PROPULSION
ELECTRIC POWER
FIRE & BILGE PUMPING



WINCH OPERATION
REFRIGERATING MACHINERY
COMMUNICATIONS

Dependable Lister Diesels are easy to start, quiet-running, exceptionally wear-resistant and easy to maintain. For full information on the Lister to meet your specific needs, write . . .

THE NATIONAL SUPPLY COMPANY
ENGINE DIVISION
SPRINGFIELD, OHIO
Distributors of Lister Diesels in the U. S. A.

Fishermen's Packing Corporation

ANACORTES, WASH.

Canners of

PUGET SOUND SALMON

Our BRANDS

SOCKEYE
"Snow Cap"—"Snowland"

COHOE
"Olympic"—"Ocean Spray"
"Green Breaker"

PINK
"Waterfall"—"Ocean Blue"

CHUM
"Golden West"—"Golden Glow"

Cannery: **ANACORTES, WASH.**

SCENES AT SCHEERERS—Three views along the packing line aboard the former Puget Sound ferry *Rosario*, converted into a modern cannery for salmon and clams.

Upon completion of the process cook the retorts are flooded with water to cool the cans; and in the case of the 4-lb. cans air pressure is maintained in the retorts during cooling to prevent distortion.

Labelling and casing of the pack moves forward along the starboard side of the ferry. There is some space for warehousing, although it is not planned to carry any substantial quantity of finished goods aboard.

UPPER DECK of the floater is used for many purposes. Case and can storage is provided by the forward salon. Plant office overlooks the dock. Former officers staterooms have been equipped for the use of Mr. Scheerer during periods of peak operations.

The crew has ample washrooms in those provided by the ferry, and the after salon is used as lunch room.

CLAM CANNING will involve some further alterations from those required for the salmon operation. These will remove the forward stairway to the upper deck in order to make place for the clam steaming and washing equipment.

As Mr. Scheerer has developed a line of smoked specialties in addition to staple canned products, he plans also to install a small smokehouse in the after section of the vessel.

FISH SUPPLY for the Scheerer operation this salmon season was derived primarily from two sources: the Svorinich group of purse seiners; and British Columbia imports. These latter were limited to Silvers during the summer season, the fish being received by truck, and delivered dressed and ready for the gang knife.

Pre-dressing the fish in Canada accomplishes two things: elimination of the import duty on inedible portions; increases the capacity of the truck.

A FAMILY OPERATION—Scheerer Canning Co. benefits from the close-knit, personal-interest supervision provided by a working family ownership. "Gene" Scheerer, head of the family, and a canneryman of long experience, maintains general management and supervision, while lending a hand wherever a hand is needed and whatever the hour of day or night.

His son Bob, recently out of military service, is superintendent and gives his personal attention to the retorts and processing.

Mrs. Gene Scheerer is the forewoman and takes her place at the filling, inspection and patching tables.

Tuna Cutting Dec. 10

The Fourth Annual Tuna Cutting takes place this year in Long Beach, Calif., on Dec. 10. Dr. Sven Lassen is general chairman.

The cutting is sponsored each year by the California Fish Canners Association, working with the National Canners Association.

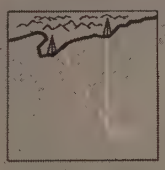
ALL SCHEERERS WORK in the operation of the Scheerer Canning Co. floater. Mr. and Mrs. E. C. Scheerer and their sons, Robert, and Gene, on the right

Steer Your Course to Greater Profits

RCA Radiomarine

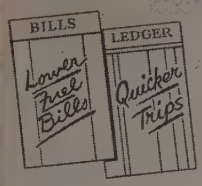
NEW LORAN

Saves You Time



Whether you are spotting time-tested fishing banks or determining the fastest course for your ship, Radiomarine Loran (Model LR-8803) cuts your running time to the barest minimum. Fast, accurate fixes speed your ship by determining your location . . . maintaining your course. And it operates in all weather . . . foul or fair.

Saves You Money



With Radiomarine Loran you can take advantage of favorable ocean currents that conserve your fuel. Quick positioning in any weather means cutting trip time . . . eliminating costly delays. And for fishing men, Radiomarine Loran helps you find the most profitable fishing banks quicker, indicates when you arrive, and helps keep you directly on your fishing position at all times.

Saves You Effort

Instantaneous Positioning

Direct reading . . . calculates automatically. Simplifies pin-pointing your position on Loran charts. Recessed scope and dial make day or night reading quick and easy. Whether you are on a fishing boat, tanker, cargo ship or luxury liner, steer your course to greater profits with Radiomarine Loran.

RCA

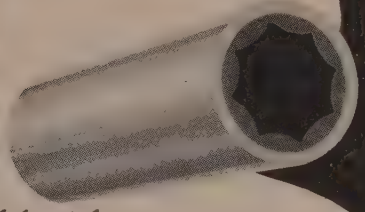
write for free information now!

RADIOMARINE CORPORATION of AMERICA

A SERVICE OF RADIO CORPORATION OF AMERICA

75 VARICK STREET, NEW YORK 13, N.Y.

LONGER LIFE FOR SHAFT AND BEARING



BJ *water lubricated* MARINE BEARINGS

BJ Marine Bearings are molded resilient rubber—bonded to a heavy brass case. Made for all standard shaft sizes from 3/4" through 3" diameter. Engineered and built by Byron Jackson Co. whose 82-year-old record of customer satisfaction assures high quality and reliable service.

Contact your nearest marine supply dealer or write for Bulletin No. 54.

PB DIVISION
Byron Jackson Co.
P. O. Box 2493, Terminal Annex, Los Angeles 54, Calif.

Authorized Dealer
RCA RADIOMARINE
Radiotelephones • Direction Finders

RADIOMARINE

DIRECTION FINDERS • RADIOTELEPHONES

Shepherd Radio Shops are skillfully manned and equipped to service your radio equipment. Complete spare parts available.

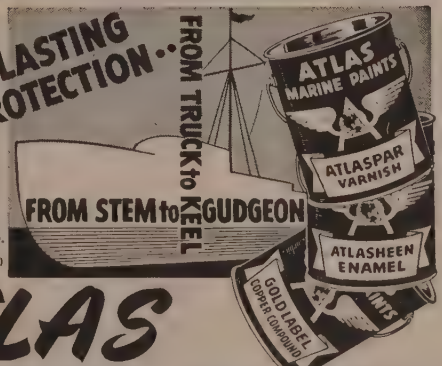
only at

Los Angeles AN. 10761
San Diego FR 99477

SHEPHERD MARINE

San Pedro TE 3-2787

FOR LONGER-LASTING PROTECTION . . FROM TRUCK to KEEL FROM STEM to GUDGEON



Ask at ship yards or
ATLAS PAINT & VARNISH CO.
1922 East Gage Ave.
Los Angeles 1
(Phone Kimball 6214)

ATLAS MARINE PAINTS

FREEZE

'em better!

AT LOW COST . . .

AND HIGH SPEED

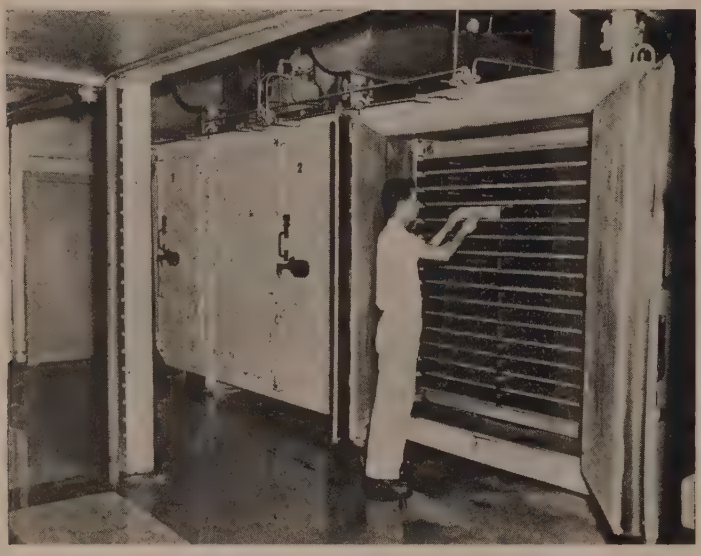
WITH the FAMOUS

AMERIO

DOUBLE CONTACT

Pressure Plate Freezers

*(U. S. Pat. No. 2,608,069) (Canadian Pat. No. 494,746)



In Frozen Food Plants throughout the World, AMERIO PLATE FREEZERS are preferred for their dependability, speed and the outstanding attractive and uniform packages they produce. There are Amerio models and capacities to meet every production need.

You can rely on "Amerios" to produce frozen packages products that sell and sell and sell. Full quality and flavor retention are assured.

Write or phone for full details

Designed For Ammonia, Brine or Freon Refrigerant

Amerio
Contact Plate Freezers Inc.
Union City, N.J.
"It's the Contacts that Count"

Send For Illustrated Brochure

Mexican Lobstermen Sign New 5-Year Sales Deal

A five-year contract for the merchandising of lobsters from Baja California has been signed by a new Los Angeles firm, San Conteen Seafood Corp., and a group of Mexican producers, or cooperatives.

George E. Fuller is president of the new firm, with B. W. Vetter, executive vice-president, and Charles A. Blackard, secretary-treasurer, all of Los Angeles.

The production of 900 lobstermen is estimated to represent about $10,000,000 for the five-year period. The catch will be distributed, it is reported, throughout the United States. Baja California lobster traditionally has been sold largely in California, Arizona and Nevada.

Mexican representatives included Major Ernesto Montenegro, representative for the governor of Baja California, Braulio Maldonada, and Roman Escamilla and Reyes Navarette, officials of the Banco Nacional de Fomento Cooperative, and Roberto Cordova, Ensenada attorney.

These Americans associated in the importation of lobster from Baja California in 1953, centering in San Diego, entered 1954 with a heavy inventory of frozen lobster (Mexican law requires that lobster must be cooked before it crosses the border). Representatives of the Mexican cooperatives producing lobster were reported to be asking a higher per-pound price for lobster in 1954 than in 1953. The season opened October 1.

The exportation of lobster from Baja California represents a considerable income for Mexican fishermen. In 1953 it is estimated that about three million pounds of lobster were delivered across the border into San Diego, representing about 42c per pound to the Mexican lobstermen.

Light-Meat Tuna Imports Make Gains

For the first nine months of 1954, imported frozen tuna, largely from Japan, accounted for 35,074 tons of the total tuna production processed by California canneries — 163,862 tons, during the nine-month period.

In 1953, foreign imports amounted to 26,318 tons of an overall tonnage of 148,631.

In 1954, Albacore tonnage imported consisted of 17,614 tons; in 1953 the amount of Albacore imported was 20,684 tons.

In October, Los Angeles-Long Beach canneries received 209 tons of imported tuna and 598 tons of Albacore, imported.

How One Tuna Packer Steps-Out

Into Dry Solubles, Oysters and Frozen Pies

● Van Camp Sea Food Company's annual report is always an intelligent and interesting presentation of the operations of a canner of fish, and unique because it is one of the few such frankly comprehensive reports in the industry.

In the report for the year 1953-1954, Gilbert C. Van Camp, president, stated that the acute competitive situation in the canned tuna trade, which developed in mid-summer, adversely affected profits at the beginning of the new fiscal year. At the time the report was issued, the lowering of the tonnage price of tuna to the fishermen had not been negotiated from $350 to $330 a ton. It was expected, as stated in the report, that a lowering of the tonnage price would contribute substantially to the ability of the cannery to move heavy inventories.

Van Camp Sea Food's report, while stating frankly a situation involving heavy inventory af canned tuna, did not minimize the contributions of the company toward the development of new products and the expansion into new fishery products, including tuna pie and canned oysters and oyster stew. The report also included the perfection of a new product known as "Dry Fish Solubles" and the addition to the products of the Laboratories Division of a new high concentrate liquid fertilizer, odor free. Another product of the laboratories in 1953-1954 is an enzymatic digester of fats, of importance in the field of sewage sanitation.

As of September 1, 1953, Van Camp Sea Food Co. entered into an agreement with Coast Oyster Co. of Seattle, Wash., whereby the Terminal Island firm became the exclusive marketing agent for Coast's Willapoint brand of canned oysters and oyster stew and acquired the right to distribute the two canned products under the *Chicken of the Sea* label, as well as under the *Willapoint* label. The oysters so packed and sold are produced by oyster farming methods—seed oysters are planted and cultivated on seeding grounds, then transplanted to fattening beds and, finally, harvested.

The *Willapoint* oyster is shucked without retorting and without loss of nectar.

The oyster stew utilizes whole milk, oysters, oyster nectar, butter, salt, monosodium glutamate and diasodium phosphate in the canning formula.

Van Camp Sea Food Company, and its affiliate, Coast Oyster Co., believe that the quality handling of the oyster before canning is the key to the products' superiority, and to the mechanized, largest oyster pack in the United States. By utilizing the national sales prestige of *Chicken of the Sea* tuna, territories formerly uninterested in canned oysters and oyster stew have been opened-up.

Chicken of the Sea oysters and oyster stew are sold primarily in the middle-west and eastern areas; Willapoint brand has always been traditionally strong on the Pacific Coast. The stew is packed in 8 and 10 oz. cans; the whole oyster in 7¾, 10 and 16 ounces. Alan E. Davis has been in charge of the sales development of the new products, for Van Camp Sea Food Co.

Foil labels for the whole oyster pack and that of the stew are by Reynolds. Mr. Davis points to the fact that with the canning of *Willapoint* oysters and stew, the housewife now has this nutritious seafood available the year around and without regard to the old tradition of eating of oysters in the "R" months only.

Van Camp's report further states, in regard to tuna pies under the *Chicken of the Sea* label: "In January of this year we entered into a contract with C. A. Swanson & Sons of Omaha, Nebraska, for the production of frozen tuna pies . . . The Swanson people, who have been so successful with frozen poultry as well as frozen chicken, turkey and beef pies and their new TV Dinners, agreed with us that a frozen tuna pie could more appropriately be marketed under our *Chicken of the Sea* label than under their own present brands or some new brand they might devise."

Through the acquisition of the preferred stock and over 94% of the common stock of the West Coast Packing Corp., Long Beach and San Diego, Van Camp in 1954 acquired a market for from 50,000 to 60,000 cases of "tonno" a year, sold largely in the Northeastern part of the country. This pack utilizes the darker tunas, packed in olive oil and heavily salted. West Coast has controlled about 50% of the United States market for tonno. The functions of this sales subsidiary was transferred to the newly acquired company and the name changed to Chicken of the Sea, Inc.

Officers of the Van Camp Sea Food Co. include Mr. Van Camp; Gilbert C. Van Camp Jr., executive vice president; Malcolm Goldie, director of sales; Montgomery Phister, vice president and secretary; and F. E. Hagelberg, comptroller-treasurer. Board of directors: Mr. Van Camp, Mr. Phister, J. T. Trixler, Donald Royce, Mr. Van Camp Jr., Mr. Hagelberg and G. A. Walker.

Robert G. Debnam is advertising manager and Brisacher, Wheeler & Staff, San Francisco, is the advertising agency.

California Tuna Operations—October, 1954

(Approximate figures for tonnage by species and total case pack.)

San Diego		San Pedro		Combined
Species	Tons	Species	Tons	Tons
Yellowfin	891	Yellowfin	1,073	1,964
Skipjack	1,752	Skipjack	2,050	3,802
Albacore	303	Albacore	965	1,268
Bonito	102	Bonito	....	102
Yellowtail	33	Yellowtail	....	33
Bluefin	....	Bluefin	125	125
Total	3,081	Total	4,279	7,360
Pack in cases	157,255	Pack in cases	205,451	363,706

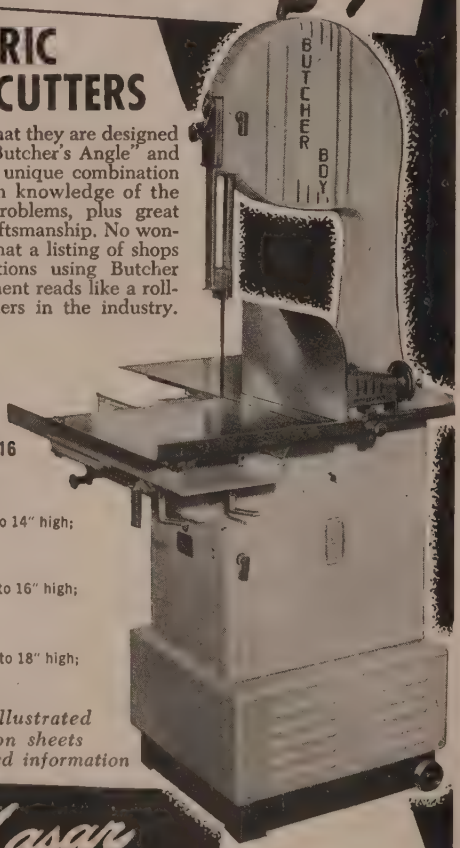
"Butcher Boy's the one I've chosen..... To cut me up when I am frozen"

The basic reason for the superiority of

Butcher Boy

ELECTRIC FISH CUTTERS

is the fact that they are designed from the "Butcher's Angle" and represent a unique combination of thorough knowledge of the butcher's problems, plus great pride of craftsmanship. No wonder, then, that a listing of shops and institutions using Butcher Boy equipment reads like a roll-call of leaders in the industry.



3 SIZES
B-12, B-14, B-16

B-12 Cutter
Takes cuts up to 14" high; 11½" wide

B-14 Cutter
Takes cuts up to 16" high; 13½" wide

B-16 Cutter
Takes cuts up to 18" high; 15½" wide

Write for illustrated specification sheets and detailed information

Lasar
MANUFACTURING CO., INC.
2540 EAST 114th STREET
LOS ANGELES 59, CALIF.

Butcher Boy—a name, and a product, you can trust. Manufactured and guaranteed, since 1929, by Lasar Mfg. Co.

DISTRIBUTORS OF NATIONALLY ADVERTISED ELECTRONIC AND MECHANICAL SPECIALTIES

RADIOMARINE
PRIMUS STOVES
SPERRY CONTROLS
EXIDE BATTERIES
J-W GAS SNIFFERS
BENDIX RECORDERS
SEN-DURE HEAT EXCHANGERS
HONEYWELL SEA SCANAR
KIDDE CO-2 FIRE SYSTEMS
MATHERS CONTROLS
GODFREY COLLARS
OLYMPIC RANGES

TE 4-4538

PAUL W. HILLER
315 AVALON BLVD. WILMINGTON, CALIFORNIA

A SEA-GOING BATTERY
—with 10 Hash Marks

Soon after Hobbs started making storage batteries, back in 1914, the Company branched out into the Marine Field.

Hobbs STORAGE BATTERY

Today, one of Hobbs' oldest steady customers is the United States Navy.

Specialists in Marine Batteries

Mercury Marine Electric Co., Inc.
2905 Jones Street
San Francisco, California

STAY-TITE MARINE PRODUCTS

Keep Boats at Peak Performance

In addition to those shown at right, Stay-Tite also makes —
- STAY-TITE WOOD CRACK FILLER
- STAY-TITE CANVAS TIGHTENER & FILLER
- STAY-TITE BILGE SOLVENT
- RUSTGO RUST REMOVER

On Sale at your Marine Supply Dealer

STAY-TITE PRODUCTS CO., 9400 Steinway, Cleveland 4, Ohio

SALT

That Has Stood the Test for Over 45 Years

All Grades :: High Quality :: Fair Prices

Long Beach Salt Co.

2476 Hunter Street, Los Angeles 21, Calif.

PROMPT SERVICE BY TRUCK OR RAIL

PHONE: TUcker 1424

FOOD FISH MARKETING

Section of PACIFIC FISHERMAN--

News and Views of National Trade in Fish and Shellfish

December, 1954

Best-Ever Chums Sell At Pace Near Speed-of-Sound

● Salmon sales managers and brokers have been saying for some time that the 1954 Chum salmon pack is the best ever put up from the standpoint of quality.

When they heard Walter Yonker, chief examiner for the Northwest Branch inspection laboratory of the National Canners Association tell the Association of Pacific Fisheries that he had never seen Chums so good, the sales manager and brokers began to believe themselves.

Mr. Yonker gave the Southeast Alaska summer Chums the fullest measure of praise, saying that they were the best he had ever seen, and that in some cases they actually carried more oil than even Copper River Sockeyes.

The Alaska fall-pack Chums he rated as better-than-normal; and he said the quality of the Puget Sound pack had been exceptionally good right up until the last days of October.

(It should be noted that the Washington Department of Fisheries closed Puget Sound to commercial fishing for the period from Nov. 1 to 15. Little fishing was anticipated after the re-opening. Thus the closure, which was for the purpose of assuring adequate spawning escapement, reacted effectively to maintain the quality of the pack.)

While to early November there were still tall Cums to be had at $15, some sellers had withdrawn and others had advanced to $16.

A packer who last summer held one of the largest positions in tall Chums announced Nov. 1 that these supplies had been exhausted and that future sales would have to come from outside sources.

The remarkable interest in Chums, even in the face of a record pack in Alaska, is generally attributed to two things:

(a) The exceptionally fine quality of the goods;

(b) The $6 spread between tall Pinks at $21 and tall Chums at $15.

Although the Holiday Season normally is counted as a slack period in canned salmon selling, leading factors in the primary market reported at presstime — with Thanksgiving looming only a few points off the starboard bow—that Chums were still selling as though they had wrap-around windshields.

● *SOCKEYES SOLID*—Despite the record pack of Puget Sound Sockeyes, the sales position on this item seems quite firm, although the price range runs from $16.50 to $18.50—the latter for hand-packed or well-known featured brands. The lower price is for buyers' label business; and the great majority of the pack seems to be priced at $17.50.

As we mentioned last month, packers and their bankers alike seem pretty well convinced that price-chopping wouldn't stimulate sales volume, unless it was carried to annihilation levels; and that the pack of 1954 should be counted as a two-year stock.

Right along this line, Roy Jackson, assistant director of the International Pacific Salmon Fisheries Commission, addressing the Association of Pacific Fisheries early in November on the subject of the Fraser River Sockeye resource, said:

> "Next year there will be no dominant race in the run. In 1955 *all races* composing the Fraser River run will be in an off-year of their four-year cycles."

Blue Diamond Active As Shrimping Reopens

Central Fish & Oyster Company, Los Angeles, took five truckloads of shrimp at the opening of the shrimp season on the West Cosat of Mexico, October 1, for processing in institutional and "consumer" packages under their *Blue Diamond* label, green or breaded.

The company is adding another green shrimp line for handling their institutional packs.

Mexican Shrimp Prices Lower as Trade Opens

Production of West Coast of Mexico shrimp early in November was centering at Guaymas, with blue-green predominating. A full range of sizes were coming across the California and Arizona borders.

Wholesale price of the biggest shrimp was from 20 to 25% less than for a similar period in 1953, and there were ample inventories for meeting the expected holiday demand. West Coast of Mexico shrimp finds its greatest market on the Pacific Coast, from 60 to 70% of production so consumed.

The season opened October 1. Marine Products Co. and Crest Importing Co. of San Diego are the largest importers of Mexican shrimp from the West Coast.

"Jim" Edington Launches His Own Food Sales Firm

At the helm of his own corporation, James A. Edington launched his food representative firm in Seattle this week.

Well-known from coast-to-coast, Mr. Edington was formerly West Coast manager for Booth Fisheries and general sales manager for Booth in Chicago. In Seattle he was general manager of Price-Rite stores, a voluntary chain operation, and was regional chief of foods for the Office of Price Administration.

Mr. Edington has handled many lines of packaged goods, as well as frozen and canned fruits, vegetables, seafoods and allied lines.

Offices for the firm are at 1000 Fourth Ave. South, Seattle.

The Edington firm is the representative in the Pacific Northwest for the Golden Dipt Division, Meletio Seafood Co., St. Louis, Mo., manufacturers of Golden Dipt Ready-Mixed Breading and Golden Dipt Batter Mix.

Sam Jones Joins Norfish Sales Staff

Sam Jones, formerly with San Juan Fishing & Packing Corp. in the East, is now associated with the packaged sea food sales department, Norfish Sales Co., Oakland, Calif.

Tuna's Advertising Bill Hits $9 Million in 1954

Although the inventory of canned tuna from California production remained heavy, around 3,000,000 cases, sales for September and October appeared as good as those for a similar period in 1953, which is tuna's biggest case pack year thus far.

Movement of a million cases before the end of the year would help considerably, some canners believed, in placing the industry in a healthy position.

Price of advertised tuna held fairly steady during October; but private labels were not fairing so well.

The $9,000,000 which it is estimated would be spent on advertising name brands of tuna in 1954, were expected to contribute greatly to moving tuna from the shelves into the kitchen, combined with National Tuna Week advertising and promotion.

Continental Can Co., in honoring the tuna industry which it serves, placed double page spreads in national magazines, November issues, with a banner line reading "Every Week Is Tuna Week".

On November 2, the Advertising Club of Los Angeles honored the Californa tuna industry with a luncheon at which Edwin L. Morris, executive director of the Tuna Research Foundation, was the speaker. Among those present from the industry were: Preston Hogue, president, Sun Harbor Co.; James Lane, president and Hal Requa, Advertising Manager, Westgate-California Tuna Packing Co.; Harold Cary, American Tunaboat Assn.; Ed Chapman, sales manager, Pan Pacific Fisheries Inc.; Mason Case, Pacific Fish Producers Institute; Donald P. Loker, president, California Fish Canners Association; Malcolm Goldie, director of sales, Robert Debnam, advertising manager, Van Camp Sea Food Co.; and Wm. W. Durney.

Pointing to the great potential for sales of canned tuna in the United States, Mr. Morris in his talk, stated that even in 1953, the greatest year yet for tuna, the average consumption was only three cans per capita. It would appear, he said, that a 20,000,000-case year would not be considered overly optimistic, in view of the opportunity for boosting consumption of high-protein tuna.

A new tuna label made its appearance in November, that of *Carnation*, for fancy and chunk packed by California Marine Curing and Packing Co., by agreement with William W. Durney Co., Los Angeles, which has an exclusive license to use the Carnation trademark for all fish and seafood products.

The production of tuna specialty packs, such as tuna-and-noodles and creamed tuna, was down considerably for the first nine months of 1954, as compared to a similar period in 1953: 82,960 to 119,627. Chunks, light meat, continued to dominate the production picture, with 3,625,413 cases for the first nine months, as compared to 1,214,381 light meat solid, standard cases.

One broker points to the fact that the case price currently in the Los Angeles area for light meat chunks at $10.00 (the lowest) still does not compare to the low of two years ago, $9.00 per case, when the price to the consumer of a can of chunk was 19c. Many chains are offering chunk now for from 21 to 23½ a can (not advertised brands).

In Los Angeles, one of the country's largest canned tuna consumers, the first week in November, chunk tuna was being offered in weekend newspaper advertising as follows: *Royal Pacific* light meat chunk, Ralph's Groceries, 22c; *Chicken of the Sea* chunk, Safeway stores, 30c; *Star-Kist* chunk, Atlantic & Pacific, 31c; *Chicken Salad* and *Gem of the Sea*, light meat chunk, four for $1.00; and *Chicken of the Sea*, chunk, Market Basket chain, 29c.

largest line of seafoods under one packer's label
Bumble Bee
quality keeps customers sold
COLUMBIA RIVER PACKERS ASSN., Inc.
Astoria, Oregon

IF IT'S Crest
IT'S Best!
Rigid attention to the highest standards of quality has established Crest Brand Shrimp as the "Cadillac" of the West Coast Mexican shrimp industry. If it's Crest—it's Best!
Write, wire or phone today. Your order will receive prompt attention.
Crest
IMPORTING COMPANY, INC.
1521 FOURTH AVE., SAN DIEGO, CALIF.

BUSINESS MUST BE GOOD in San Francisco. Anyway, it brought these beams to William O. Dooms, left, who handles the Gorton line of packaged fish products in Northern California, and F. M. Bundy, president of Gorton-Pew Fisheries, who packs the goods in Gloucester.

Who Says: "You Can't Sell Frozen Fish in San Francisco"?

● *"San Francisco is a fresh fish town. You can't sell packaged frozen fish in San Francisco."*

Having heard that wheeze, and having heard it challenged, a visiting *Pacific Fisherman* staffer set out one day last fall to check it on the ground, and particularly in the newer sections, with their sleek supers. Admittedly, San Francisco still has lots of corner groceries, lots of "Mama-Papa" stores, and that they sell precious little frozen fish.

But San Francisco is one of the great metropolitan centers of the country, where hundreds of thousands of people do their food buying in as big and beautiful supers as are found anywhere in the United States.

To see some of them, the visiting reporter sought an educated guide in the person of "Bill" Dooms of Wm. O. Dooms Co., Oakland fish broker and specialist in packaged frozen fish merchandising.

After surveying a cross-section of San Francisco supers, these conclusions stood out:

1. Packaged frozen fish sales in the San Francisco area are rising rapidly, and largely in addition to, rather than at the expense of, the trade in fresh fish.

2. This is in line with the national trend toward greater consumer confidence in frozen fish quality.

3. A very substantial percentage of modern San Francisco super markets' frozen food sales are frozen fish.

4. From 10 to 12% of the frozen food cabinet space—not including that for ice cream—is devoted to frozen fish.

5. This is probably greater than the national average; certainly greater than the average in seacoast cities.

These conclusions are borne out by the testimony of the men who buy, and sell, the products. For example, there's Nathan Temkin, grocery buyer for one of the big "King" supers:

"We haven't carried fresh fish in two years. We used to carry it in the meat counter one or two days a week, but with the rise of packaged frozen fish quality and availability we gave up the fresh line. Now we sell fish seven days a week—yep, keep open Sundays. Sure San Francisco is a good frozen fish town."

WESTGATE-CALIFORNIA TUNA PACKING CO.
28th Street and Harbor Dr. San Diego, Calif.

Then again there's John McClelland, who runs the meat and frozen foods divisions of a "Lucky" super in Stonestown:

"Every week I sell three times as much frozen fish as I do fresh. We carry fresh fish only three days a week. There's a better profit in frozen fish because there's no loss and shrinkage.

"I'm getting more cabinet space for frozen fish, enough so I can have one bin for each item—*and two for fish sticks.*"

This matter of fish sticks couldn't be missed. The women were picking them up, so we asked one:

"Have you tried fish sticks before?" "Oh, surely." They're wonderful."

"And do the children like them?" "Oh, *YES.*"

Good deal of play on frozen tuna pies also—by the way, the survey was made on Friday. Every modern super stocked them, and usually three brands, *Ocoma, Star-Kist* and *Chicken-of-the-Sea.*

Bill Dooms, the guide on the tour, reports that the way his firm completed its first full year in business leaves him optimistic all over. His lines include:

New England Fish Co. packaged products; *Gorton-Pew Fisheries,* canned and frozen products; *Ivar Wendt,* canned salmon, clams and crab and frozen crabmeat; *Reuther Sea Foods,* frozen packaged shrimp, breaded and raw; *Trout Industries,* frozen rainbow trout; *Pierce Fisheries,* frozen abalone steaks; *Holmes Packing Co.,* Maine sardines; *Anticich Canning Co.,* canned shrimp and oysters.

Non-fish lines handled include: *Meletio Sea Foods Co.,* "Golden Dipt" breading; *Anderson Soup Co.,* frozen soups; *J. R. Simplot Co.,* frozen products.

The fresh fish department held one sharp surprise for the visiting reporter: that in San Francisco you can buy salmon bellies as such, and for the same price as salmon steaks; and if you wish it you can buy a salmon roast with the belly cut off — fine, prime, beautiful, thick-bellied troll Chinooks, too.

C. Myles Reinke, of the firm of Reinke & Amende, Los Angeles, recently attended the meeting of the National Fisheries Institute board of directors in Washington, D. C. He is national secretary of the Institute.

Canadian Brand Salmon Sells Again in Britain

For the first time since the war, when British buyers go shopping this Christmas, they will find the shelves of their favorite food stores stocked with British Columbia canned salmon bearing company brand labels.

This is one result of the discontinuance of the British government's bulk buying system and the restoration of private dealing on a permit registration basis, whereby the British Board of Trade through the Ministry of Food allocates funds for the purchase of various commodities in the dollar area and elsewhere.

Under the new plan, which represents a revival of the pre-war practice except in respect to restriction on funds, approximately $6,800,000 was allocated for purchases of salmon in the North American market during the period commencing October 1 and terminating next June. This is in addition, of course, to the 228,000 cases of canned salmon bought in British Columbia by the United Kingdom's Ministry of Food in its final order under the bulk buying system.

Just how the present allocation will be shared is a matter for speculation among the packers at this time. In addition to the funds made available for purchases on this continent, the United Kingdom is also providing for some purchases of canned salmon in Japan and Soviet Russia to an extent that has so far not been revealed.

An instance of a return of British interest in British Columbia salmon was provided in October by the visit of several prominent buyers, notably a deputation led by F. L. Kassell, senior director of the Co-Operative Wholesale Society of Manchester; J. M. Sanderson, manager of the society's grocery department, accompanied by L. H. Haworth, Montreal manager, and T. W. Robinson, representing the organization in Vancouver, B.C.

"Carnation" Tuna Label Rights to Calmarine

William W. Durney, who, by agreement with Carnation Company, now has an exclusive license to use the *Carnation* trademark for all fish and seafood products, announces that an agreement has been reached with the California Marine Curing & Packing Company, one of the country's major tuna canners, allowing them to pack the finest quality tuna under the *Carnation* trademark. This will augment "heat and serve" *Carnation* Creamed Tuna that is now in national distribution under the well-known red and white label.

Merchandising and advertising plans are now being formulated by the Erwin, Wasey advertising agency for California Marine Curing and Packing Company.

SEATTLE MARKET

Salmon prices freely quoted by primary market sellers at presstime for this issue, per case of 48 cans (unless otherwise noted) fob. Pacific terminals.

Alaska Red, talls	$28.00-29.50
Alaska Red, halves	16.00-17.50
Red talls (frozen)	27.00
Alaska King, tall	24.00-25.00
Alaska King, halves	15.00-16.00
Alaska Chinook halves	16.50
Alaska Pink, talls	21.00
Alaska Pink, halves	12.50-13.00
Alaska Coho, talls	23.00-24.00
Alaska Coho, halves	13.50-14.00
Puget Sockeye, halves	16.50-18.50
Puget Sockeye, quarters	9.50-10.50
Alaska Chums, tall	15.00-16.00
Alaska Chum, 12/4 lb.	16.00
Col. Riv. Chinook	20.00-21.00
Col. Riv. Blueback	18.00
Select Chinooks	15.50
Crab—	
King, domestic ½s/24	16.00
Dungeness, ½2s/24	12.00-12.50

Hitting on All "6"

"6" Aggressive Salesmen Building Canned & Frozen Seafood Brands in CHICAGO & MIDWEST. Sales efforts second to none for aggressive producers.

L. H. FROHMAN & SONS • Sales Agents
FOR CANNERS AND PACKERS OF FOODS
510 N. DEARBORN STREET CHICAGO 10

VITA FOOD

TRADE MARK

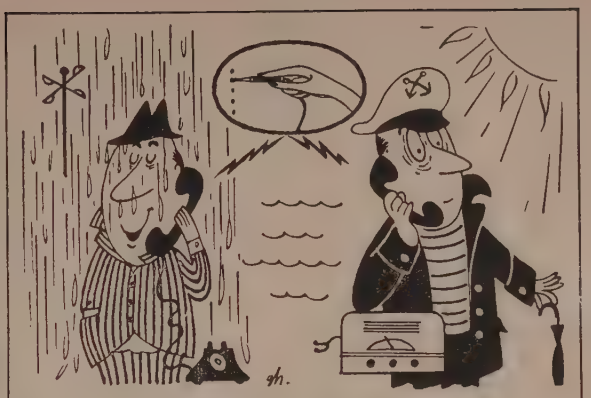
PRODUCTS, INC.
GENERAL OFFICES — NEW YORK CITY

Importers & Exporters — Producers, Packers, Smokers

FISH OF ALL KINDS

Mildcured and Frozen from all Principal Centers of Alaska

SEATTLE OFFICE — 1844 WESTLAKE NORTH

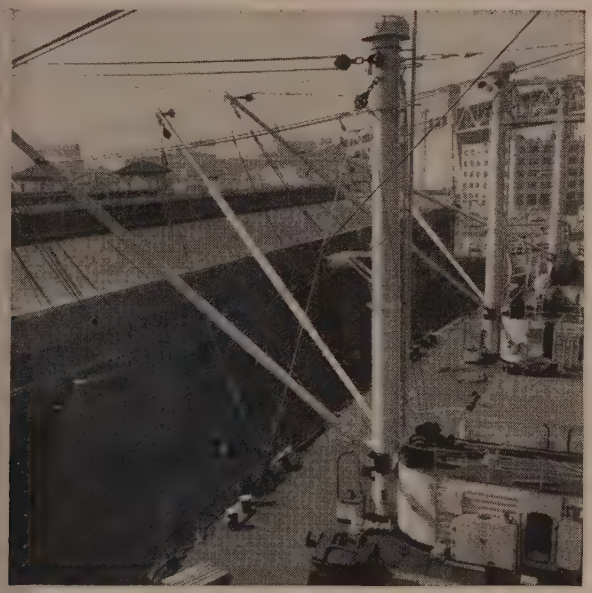


It's easy to get coastal weather reports

. . . when you use *ship telephone service*. For your Marine Operator—without charge—transmits the latest weather reports twice daily, and storm warnings as soon as received. If you miss a report, just call in for it. The charge for a "repeat" is small.

For more facts on how ship-shore service connects vessels at sea with telephones all across the nation, contact Pacific Telephone in your nearest large port city and ask for our free booklet, *Ship Telephone Service*.

Pacific Telephone



Tiger Brand Wire Rope at work—shown here in use on the *Hawaiian Merchant*, one of the fleet of Matson cargo ships.

For cargo working gear— Matson chooses Tiger Brand!

For more than 20 years, a substantial part of the Matson cargo fleet has used Tiger Brand Wire Rope on their working gear. Hold men like its flexibility and easy handling . . . winch drivers prefer Tiger Brand because it spools evenly, lasts longer. So when you need wire rope, rely on tough Tiger Brand. There is a local Tiger Brand distributor to serve you in all major Western ports.

FREE BOOKLET! PF-12

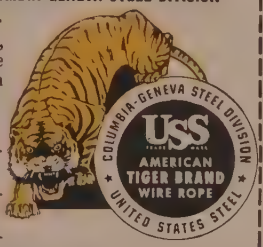
UNITED STATES STEEL CORPORATION—COLUMBIA-GENEVA STEEL DIVISION
1403 RUSS BLDG., SAN FRANCISCO 6, CALIF.

Please send me your free booklet, "Longer Life From Your Wire Rope", that gives information on use and care of wire rope.

*Name*_____

*Address*_____

*City*_____ *State*_____

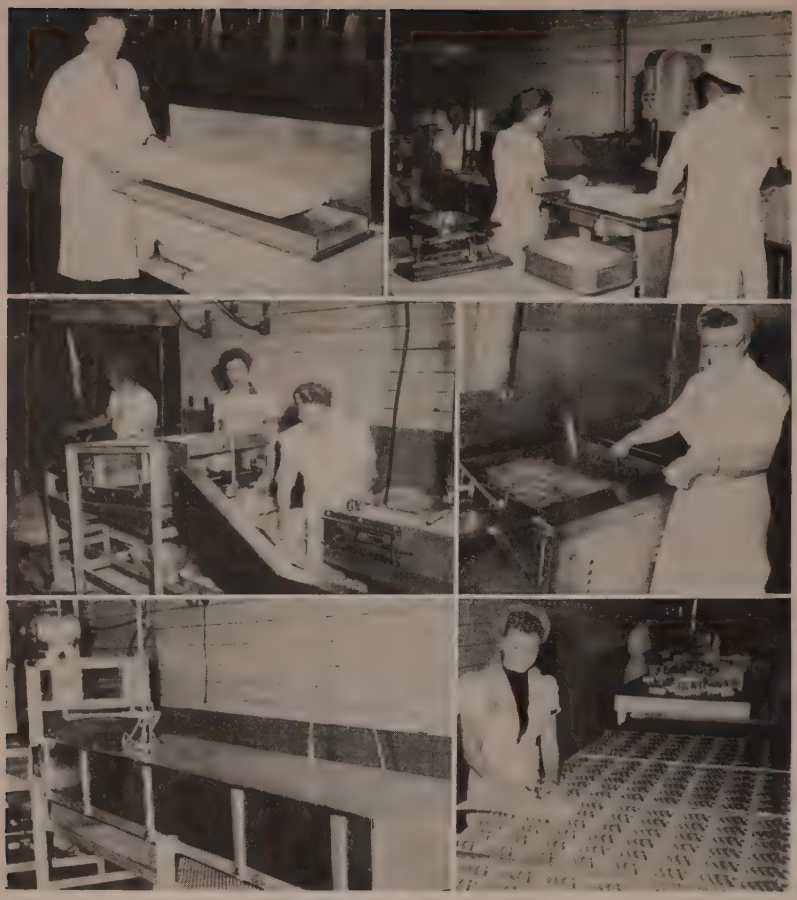


USS

USS TIGER BRAND Wire Rope

United States Steel Corporation • Columbia-Geneva Steel Division

UNITED STATES STEEL



SIX STIX STEPS at B.C. Packers' great Imperial plant. Reading from the left in each row: P. A. Sunderland, food technologist, shows the large frozen block from which the sticks are cut, and the aluminum pan in which it is frozen; the sticks are sawed; breading sees mechanical application supplemented by manual finishing; precise temperature and timing rules the fry cook of the sticks; cooling of the sticks takes place in this unit, built in Imperial's own shops; packaged sticks are placed on trays for freezing in the Birdseye plate frosters.

How B. C. Packers Cut 'n' Fry Sticks for Canadian Trade

• Production of fish sticks is one of the latest developments at British Columbia Packers' big Imperial plant at Steveston, B. C., near the mouth of the Fraser River. The company embarked on this line on an experimental basis several months ago to test both the process and the market. Thoroughly satisfied on both counts, orders were given to proceed with manufacture of fish sticks on a commercial level.

The fish stick operation at the Imperial cannery is entirely separate, of course, from the shipment of frozen fish blocks by B. C. Packers' plants in British Columbia and Nova Scotia, by refrigerator truck, to California, for conversion into fish sticks. The U. S. tariff is said to be prohibitive to any Canadian packer attempting to market the finished article in American territory.

So far, the company has been using cod exclusively. There has been talk of introducing other lines such as salmon, but nothing definite has been done in this connection.

• *IMPERIAL PROCESS* — In the fish stick process at Imperial, fish is delivered from Prince Rupert, Victoria or elsewhere and packed in specially designed aluminum pans 39¼" long and 11¼" wide, 2 3/16" deep. These are covered by an aluminum top, placed under pressure and frozen in a Birdseye machine. When reopened, the pans yield a 36 lb. solid block of frozen fish ready for the processing line.

First step is at the cutter or mechanical saw, manufactured by Kleen-Kut Manufacturing Co., Cleveland. The frozen block is fed to the cutter manually and it is gradually trimmed down so that the "sticks" can be passed along by conveyor to the batter machine, where they are immersed in Golden Dipt breading manufactured by Meletio Sea Foods Co. Dripping with batter, the sticks are conveyed to the breading machine, and women operatives see that the sticks are thoroughly covered with the dry material. The next stage sees the dipped and breaded sticks dropped onto trays which in turn are placed in cooking vats for brief immersion in boiling vegetable oil. The devices used at this point are a Wells Manufacturing Co., San Francisco, electric toaster and an Annetsberger gas-fired machine, manufactured at Northbrook, Ill. Experience has indicated that gas provides more rapid heat recovery, and a continuous gas cooker may soon be installed at the plant.

After the toasting or cooking process has been completed, the sticks are ready for cooling, and a continuous cooling system consisting of moving belt and metal-inclosed chamber is now being installed. The cooked sticks are dropped on the belt and then conveyed through a tunnel, where they meet a counter-current of cold air entering the chamber from the opposite end.

From the cooler the sticks go direct to the packing table where they are manually packed in attractive 10-oz. cardboard containers. Trays of these packages are then carried to the Birdseye machines again for freezing and from that point they are delivered to the trade.

E. S. Turnill is plant superintendent and the fish stick operation is directly under his direction, with technical supervision in charge of P. A. Sunderland, food technologist at Imperial. A good deal of the equipment built at the plant for this operation was designed by Fred Smallwood, head of the machine shop. He has been with the company many years and was once foreman at the Kildonan cannery on the west coast of Vancouver Island.

Indications are that fish sticks have become a permanent feature of the Canadian household menu, just as they have in the U. S., and if the supply of raw material can be maintained production should continue to rise. Company executives are already discussing refinements and improvements in the processing and possible new products using different materials but similar in general conformity and manufacture to fish sticks.

All-Tuna Cat Food Sounds New Sales Note

A new fish cat food, with a large dash of whimsy and sophistication in label and advertising, has entered the competitive cat food market, which represents today a substantial dollar value for fish canneries and fish by-products.

Purr is distributed by Sun Harbor Packing Co., Terminal Island, and packed by Westgate-California Tuna Packing Co., San Diego., which some months ago acquired the former Southern California Fish Corporation, packing one of the oldest names in tuna, *Blue Sea*. Subsequently the company name was changed to Sun Harbor Packing Co.

Since *Purr* utilizes only the red meat of the tuna, the packing process is relatively simple. At the end of each day's packing, the red meat is collected and taken to the pet food line which uses a grated tuna packing machine for canning. Cans are 6½ oz. in weight and shipping containers are the zip-open type.

The analysis of *Purr* shows this: minimum crude protein, 22.50%; crude fat, 2% crude fibre, .25%; moisture, 74%; ash, 2%. Jack Buchanan, in charge of its sales, says *Purr* has exceptionally high protein content among cat foods, with no other ingredients than tuna added.

Distribution and sales began in the San Diego, Los Angeles and Phoenix areas, with a supporting advertising campaign through the Elwood J. Robinson agency, Los Angeles.

Tuna Researchers Compare Notes at La Jolla

Tuna research experts from the West Coast, Canada, Hawaii and Peru exchanged information on current projects at a three-day November session at Scripps Institution of Oceanography, La Jolla.

Bell Shimada of the Inter-American Tropical Tuna Commission was chairman of the conference. The Peruvian delegate was Lt. Comdr. Jose Barandiaran, former Scripps student, now in charge of the oceanographic section of the Peruvian hydrographic office.

Uncle Wants Species Specified on Sticks

U.S. Food and Drug Administration makes it plain in a recent ruling that the "common or usual name of each variety of fish present in the package" must be stated on the label.

Moreover, the statement continues: "We do not consider that the statute authorizes such legends as 'Haddock, Pollock and/or Cod' ".

Skeena Salmon Project Follows Fraser Pattern

Canada intends to apply to the Skeena River salmon a program of study, research and management similar to that which has functioned successfully on an international level between Canada and the United States on the Fraser River.

Announcement of the appointment of a committee to direct a concentrated effort to increase the annual commercial yield of salmon originating in the Skeena River system was made in Vancouver, B.C., by Fisheries Minister James Sinclair.

The committee comprises A. J. Whitmore, chief supervisor of fisheries for the Pacific area, and Dr. Alfred W. H. Needler, director of the Pacific Biological Station at Nanaimo, who came to the Pacific coast this year after several years of biological research on the Atlantic. A full-time director of the Skeena River investigation will be named by this committee through the Fisheries Research Board of Canada. An advisory group drawn from the fishing industry will also be established.

Mr. Sinclair said that the committee's work would be patterned along the lines of the Sockeye Commission's long-term program on the Fraser, and that the latter had clearly indicated that the techniques developed and followed by the international body could be advantageously adopted on other rivers in British Columbia.

Monterey Canning Gear Shipped to Venezuela

Most of the machinery from the Monterey Canning Co., Monterey, Calif., is being dismantled and crated for shipment to J. M. Marcano Hernandez, a Cumana, Venezuela, fish canning concern. The firm also bought 1-lb. tall and oval can closing equipment from the American Can Co.

It is understood the Venezuela firm is being represented by George J. Kuhrts, Standard Steel Corporation, Los Angeles.

So much depends on the oil!

● The delicate flavor . . . the tempting freshness of your finest canned fish can be entrusted to Archer "S" because this clear, bland soybean oil has had every trace of odor removed by a special refining process. Also, you get the same high quality oil *every time you order*. Archer "S" *can't* vary. It's refined not in batches, but as an endless "ribbon" of oil. By streamlining refining, we are able to *streamline the cost* of Archer "S" too. Ask us for samples and prices.

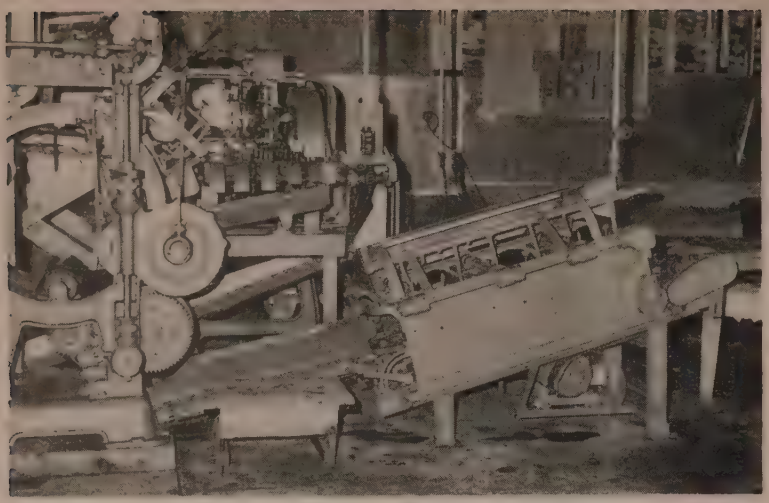
Improve the Flavor... pack with

Archer QUALITY

Archer "S"

America's Finest Soybean Salad Oil

Archer-Daniels-Midland company P.O. Box 839 • Minneapolis, Minnesota



Joe Most Slimer attachment on an Iron Chink operating in the Kayler-Dahl Fish Co. Cannery, Seattle. The gear-driven wheel at the discharge point of the Chink reverses the presentation of the salmon, which then enters the inclined slimer head-end first and belly-up. Removed housing shows part of the three sliming brushes, each following a fish spreader.

Kayler-Dahl Cannery Features Most's Slimer

Newest salmon cannery on Puget Sound got going late in the fall season when Kayler-Dahl Fish Co. put its one-liner "on stream" at Pier 57, Seattle.

The plant is featured by the first production installation of a new sliming machine developed by J. E. Most, president of the Copper River Packing Co., who has perfected the machine from the earlier Burpee-Letson designs, which he controls.

The slimer proved highly effective and satisfactory on Puget Sound Chums, according to Dean Kayler, who found that it handled the output of the plant's Iron Chink with the service of two—or at the most, three —persons to inspect the fish and correct any faults of workmanship on the part of either the Chink or the slimer.

The slimer takes the fish at the low-level discharge of the Chink, turns them over and end-for-end. Then, as they are elevated to table level, puts them through three spreaders, each followed by a revolving nylon brush.

Mr. Most expects to make some further improvements on the machine and then put it into commercial production before the next packing season.

The Kayler-Dahl cannery has a number of other features. No coolers are used. Instead, the cans roll from the Canco vacuum machine into a retort basket standing in a tank of water, which serves to ease the fall of the cans without damaging them. When the basket is full it is picked up by an electric hoist on a rail crane, which revolves and places the basket's wheels on the tracks running into the retorts.

Two men suffice to do the work connected with loading the baskets, filling the retorts, supervising the cook, and the cooling, and unloading the retorts.

Following the cook, the cans are cooled in the retort by filling it with cold water, holding it full for five minutes and then running it down. Residual heat is sufficient to dry the cans.

Robt. C. Gosse, Former B.C. Operator, Dies

Robert C. Gosse, one-time fishing and canning company executive, died recently at Vancouver, B.C.

Born in Newfoundland, Mr. Gosse arrived in Vancouver in 1887, joining the canning firm of J. H. Todd & Sons at Steveston. In 1908 he formed the Knight Inlet Canning Co., an enterprise which was later sold to Bell-Irving interests.

In 1913 the Gosse Packing Co. was formed, and later amalgamated with British Columbia Fishing and Packing, which in turn became British Columbia Packers in 1928.

In later years until his retirement, Mr. Gosse was associated with his brother R. J. Gosse in a cold storage business, and in Oceanic Fisheries.

Mackerel Fishing Limited

Mackerel production from Southern California boats amounted to 575 tons during October, despite the fact that most canners were refusing to buy the fish. The tonnage resulted in 7,090 cases.

Anchovies accounted for 834 tons during October, and a case pack of 8,750.

Phil Andrews, Veteran Cannery Supplier, Retires

Retirement of Phil Andrews, for 30 years a specialist in salmon cannery plant and fleet supply, was announced by Pacific Marine Supply Co., effective Dec. 1.

Mr. Andrews joined the sales force of Pacific Marine Supply Co., Seattle, in 1921, and three years later, in 1924, Edward Cunningham, then vice president and general manager, put him in charge of the company's cannery department, which he has headed and handled ever since. In the cannery department he succeeded Stuart Strong, who had been associated with its development for many years.

Entering the field of salmon cannery supply just as the industry was recovering from the swift shake-out of 1921, Mr. Andrews served it intimately through the period of cannery accumulation during the Twenties, followed by the trials of the depression period.

Beside his duties in charge of the P.M.S. cannery department, Mr. Andrews developed the company's fire pump business, which has grown steadily in importance as a part of the company's business. This pumper, used throughout the world for forest protection against fire, has shared with cannery supply Phil Andrews' interest and efforts.

As few men have, Phil Andrews has known the salmon canning business thoroughly, and from the viewpoint of one who serves it from the sidelines—and who will continue contact with it, as it is to be expected that he will be seen and active along the Seattle waterfront.

Half-Million Sockeye Pass Reopened Babine

Close to 500,000 spawning Sockeye salmon have made their way to the Babine Lake spawning grounds, according to a report issued from the Department of Fisheries in British Columbia.

The run was not made by the fish affected by the Babine River rock slide which seriously cut into the escapement of the sockeye run in the fall of 1951. The blockage has since been cleared, but the measure of success in saving the 1951 and 1952 runs will not be known until the next two years.

A poor year was forecast earlier by department officials, but the strike of west coast gillnet fishermen, and special closures have allowed the required number of spawners to reach the grounds.

Four Guest Guessers Tie For Top

● Four of the "guest guessers" who were asked last spring by *Pacific Fisherman* to give their forecasts of the 1954 Pacific halibut catch, landed "right on the nose".

Their estimates of 70,000,000 lbs. —a figure entered by each of the four—was about as close as one could be expected to come. At presstime the best preliminary figure which Heward Bell, assistant director of the Halibut Commission, had for the season was: "Over 70 million; under 70½ million".

Who were the winning estimators?

Harold A. Christenson, manager, Fishing Vessel Owners Association of British Columbia.

Nels Larsen, president, Ketchikan Fishing Vessel Owners Association.

S. M. Rosenberg, president, New England Fish Co.

Knute Thompson, Petersburg fish buyer.

These close-to-perfect guesses were the highest figures entered. From 70 million to estimates ranged down to 61,900,000 lbs., with an average of 66,760,000 lbs.

1,460 Tuna Tagged

N. B. Scofield, California Fish and Game research boat, in a cruise ending early October tagged 1,456 Albacore, three Skipjack and one Bluefin tuna, in addition to yellowtail.

The Albacore, feeding heavily on numerous schools of small anchovies, were captured in water of a surface temperature ranging between 57.9 degrees F. and 70 degrees F. Many were tagged in an area between 40 and 80 miles southwest of Pt. Arguello, in "green" water.

Van Camp Closes Columbia River Plant

Indefinite shutdown of the Van Camp Sea Food Co. cannery at Astoria, Ore., was announced late in the fall by Donald Doran, its manager, who has been transferred to duties at the company's San Diego plant.

The plant had operated intermittently on fish from the company's South American operations through 1954, the last shipment being a consignment of 900 tons delivered in August.

Fish Sticks Flurry Hits Los Angeles Frozen Trade

The Los Angels area frozen food market, considered second largest in the country, saw stiff advertising and sales competition in October when various brands of frozen, pre-cooked fish sticks were advertised in the Los Angeles area daily papers.

F. E. Booth Co., San Francisco, introduced its new *Crescent* brand fish sticks in large-scale advertising in Los Angeles. These are pre-cooked and packed 10 sticks to a package in the Long Beach plant of the F. E. Booth Co. Soule-Gibbs & Co., Los Angeles, are exclusive Southern California sales agents for the sticks.

In the same week Birdseye division of General Foods took page space in daily newspapers to introduce its "ocean perch" pre-cooked fish sticks, net weight 10 oz.

In the frozen food cabinets of the Los Angeles area grocery stores are currently featuring other frozen fish sticks, some pre-cooked, including *Blue Diamond, Freeman Certi-Fresh, Rupert, Ocean Garden, Gorton's, 4 Fishermen, S-T-M, Booth's.*

Safeway Stores were reported to be introducing in November its own frozen fish sticks.

fresh frozen

SALMON

AND

HALIBUT

STEAKS

FILLETS

and now . . .

SALMON
HALIBUT
and FISH

STIX

fresh frozen — breaded — ready to cook

SAN JUAN FISHING & PACKING CO.
FOOT OF STACY STREET — SEATTLE

Japan Considers Revision Of Albacore Check Price

Advices from *Pacific Fisherman's* correspondent indicate that export of frozen tuna from Japan has slowed sharply; and that the reason given there is "because of heavy stocks of canned tuna in the United States".

As result of the slow movement, quotations offering frozen Albacore are said to have been sharply reduced, one firm reporting that offerings as low as $310 per ton for Albacore are not being accepted by American buyers.

It is understood that late in October directors of the Japan Frozen Food Exporters Association met in Tokyo to discuss revision of the current check prices.

The matter is understood to have been taken under advisement and study by the MITI authorities.

Ed Medley Dies

Edward F. Medley, who for more than 40 years had specialized in legal practice associated with fisheries in Alaska and Seattle, died in Seattle late in October at the age of 71.

He had been legal counsel for a number of Alaska salmon operators over the years, and was well and widely known in the industry and throughout Alaska.

California Crab Men Cooperate on Problems

Crab Men of Northern California met recently at Fort Bragg, chosen because it was centrally located. Every port from Crescent City to San Francisco sent representatives. Problems pertaining to the crab industry were discussed and solutions sought. One of the important issues decided upon was the cooperation and coordination by and between the various marketing associations, to the end that their members would respect the market order in force when working out of other than their own port.

Another important point discussed was the method of placing a value on the produce. It was decided that in order to accomplish this effectively that it was imperative for the Marketing Associations to know the trend of the wholesaler's price, the amount of picked meat in the freezers, and the extent of the inventory of the grocery pack.

The meeting as a whole was very informative and satisfactory, and all those who attended felt that much progress had been made. The meeting however, might have lasted longer but the odor of delicious food got too strong in the meeting hall. Wives of the Directors of the local association served them a pot luck dinner after the meeting. There were approximately 40 served.

preferred by Western fishermen since 1856

TUBBS FISHING ROPE

Made in the West, Tubbs Extra Superior Manila has long been a favorite with Pacific Coast and Alaska fishermen.

Careful blending of first grade Manila fibers plus special lubrication and treatment for water repellency make Extra Superior Manila unsurpassed for toughness, strength and easy handling flexibility. And you'll find, too, that Tubbs costs less to use because it stays stronger, lasts longer.

Whatever your fishing requirements, there is a Tubbs rope engineered to do the job right. For pot warp, purse lines or general deck use, choose Tubbs — a trusted name in rope since 1856.

TUBBS SUPERCORE CORDAGE COMPANY

TUBBS CORDAGE COMPANY

SAN FRANCISCO SEATTLE Portland Los Angeles New Orleans Houston Chicago New York

Dozen Herring Plants Reducing in B.C.

At least a dozen, and probably more, reduction plants will be working on herring in British Columbia during the present winter. Market has been good for oil, accepting everything that's offered, but meal is moving slowly. This is just the reverse of the situation in other recent years; one of the vagaries that make the fishing business so fascinating and often worrisome.

Canadian Fishing Co. will probably have more reduction operations active this season than any other organization—Butedale, Gulf of Georgia, Port Albion and probably Nootka. B. C. Packers will depend on Imperial, Prince Rupert and Namu. The Hecate plant was dismantled last spring.

Nelson Bros. Fisheries will be represented by their Colonial plant at Steveston and Port Edward, near the mouth of the Skeena. Anglo-B.C. Packing Co. will operate Phoenix, as in past years, and other one-plant companies include North Shore Packing Co., National Fisheries at Shingle Bay, North Pender Island, and Prince Rupert Fishermen's Co-operative, which enters the reduction picture this year for the first time with a plant now under construction and expected to be ready for operation before Christmas.

Although the season was still young, herring seiners made some heavy hauls during October and early November, especially in Swanson Channel and Nanoose Bay, where about 50 vessels were operating. Herring began to show in large numbers about October 27 and more than 4000 tons were taken in a single night's fishing.

The Fisheries Department report of November 3 showed that more than 30,000 tons of herring had been taken in the lower east coast area, where the quota was 40,000 tons, and nearly 10,000 had been harvested in the middle east coast. At that date 2,654 cases had been canned, 6,700 tons of herring meal had been processed and 1,108,496 imperial gallons of herring oil produced.

H. R. MacMillan Visits U.K. on Salmon Sales

H. R. MacMillan, chairman of the board, B.C. Packers, Ltd., Vancouver, B.C., planned to leave New York November 10 for the United Kingdom where he will confer with canned salmon importers relative to problems arising from the recent de-control of canned salmon buying.

Canco of Canada Advances G. H. McVean

American Can Co. has appointed G. H. McVean vice president and in charge of operations of the newly organized American Can Co. of Canada, Ltd., as part of a plan to decentralize operations and provide greater autonomy for the company's operations in Canada.

E. H. Edwards Co. Advances Kermit Williams in Office

New officers of the E. H. Edwards Co. were elected recently at the annual meeting of the board of directors, held at the company's headquarters in South San Francisco.

Kermit Williams, former executive vice president and secretary, was elected executive vice president and treasurer. As treasurer, Williams replaces Norman McEachen who announced his retirement. He joined the Edwards Company in 1938.

George Wagner, chairman of the board, Sterling Edwards, president, and Russell F. Hendrick, vice president in charge of sales, were re-elected to their posts.

In his report to stockholders, President Edwards stated that gross sales were up slightly compared to last year and profits had also increased. He attributed this partially to the transfer of the company's fish-trap netting operations from Alaska to South San Francisco, a move that resulted in greater operational efficiency.

The 40-year old firm has branches in Seattle, Washington; Portland, Oregon; Los Angeles, California; and Houston, Texas, with distributors throughout the West, Gulf Coast, and Mid Continent.

THE REAL PROFIT IS IN THE Product Yield!

STANDARD LOW TEMPERATURE FISH MEAL DRYERS

2% TO 5% PROTEIN GAIN – 2½% MEAL GAIN

HIGH PROTEIN MEAL. Actual laboratory tests prove that STANDARD low temperature drying produces up to 2½% more meal with at least 2% more protein than high temperature drying.

OIL, LOW IN FREE FATTY ACID. A STANDARD plant assures you peak delivery of top quality, low moisture, low acid oil.

ELIMINATES SCORCHING AND BURNT ODORS. Low temperature does not degrade or burn protein. Eliminates expensive vapor incinerators.

Retorts with quick closing doors | Conveyor type packing tables | Air conveying and sacking equipment | Cookers and presses | COMPLETE FISH PROCESSING EQUIPMENT

WRITE FOR COMPLETELY ILLUSTRATED FISH PROCESSING BULLETIN TODAY!

STANDARD

STANDARD 52 YEARS 1907 1954 STEEL CORPORATION

STANDARD STEEL CORPORATION

5013 Boyle Ave., Los Angeles 58, Calif ● 15 Park Row, New York 13, N. Y.

F-6

THE ALASKA LINE

First
In Serving
Alaska's
Greatest
Industry

ALASKA STEAMSHIP COMPANY
Pier 42
Seattle 4

PETERSBURG
Cold Storage Co., Inc.
PETERSBURG, ALASKA
Ralph Hall, Manager
Commercial
FREEZING and STORAGE
Excellent Facilities for Buyers and Fishing Boats
BAIT ICE
Radio Call KWO 28

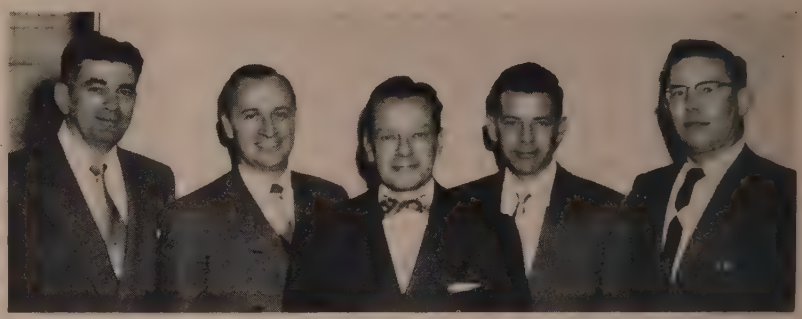
H. C. HANSON
Naval Architect :: Engineer
Phone ELiot 3549
102 Colman Ferry Terminal
Seattle 4

YOU MAKE MONEY ON THE BEACH, TOO
when you bring your boat to
NATIONAL STEEL AND SHIPBUILDING CORPORATION
HARBOR DRIVE AT 28th
Phone Franklin 9-8065 • San Diego 12

ARTHUR DE FEVER
Naval Architect & Marine Surveyor
Consultation Re-Conditioning Survey
Ship Design Inspection Appraisers
701 East Harbor Drive, P.O. Box 1049
San Diego 12, California
Phone No.: F-9-2159

J. J. CAMILLO
Wholesale SEA FOOD Broker
935 W. Harbor Drive, San Diego 1, Calif.
Maritime Agency
BROKER and AGENT
Phone Franklin 5189

LINES and LEADERS



CURRENT PROBLEMS were the main subject of a meeting of Pacific Coast executives of Raytheon Mfg. Co., Equipment Division, in San Francisco recently. Those attending the meeting were: from the left, Emile J. Rome, San Francisco district manager; D. J. Webster, marketing manager, Waltham, Mass., Capt. D. R. Hull, vice-president and equipment operations manager, Waltham, Mass.; R. W. Mackay, district manager, Seattle; and J. L. Lovett, district manager, Los Angeles.

Water-Lubricated Marine Bearings Now Available from Byron Jackson

A new line of water-lubricated marine bearings in all standard shaft sizes from ¾" diameter through 3" is now available from Byron Jackson Co.

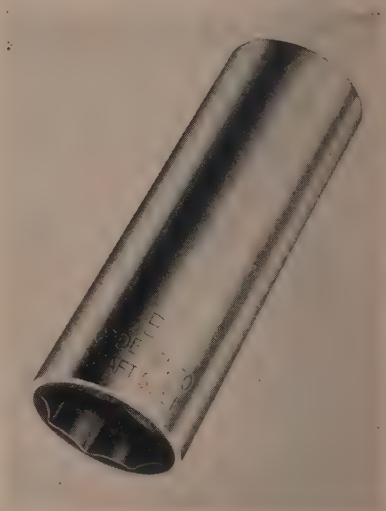
Although a relatively new item in the Byron Jackson line, it is emphasized that these BJ water lubricated marine bearings are the product of more than 25 years of experience in specialized rubber compounding, molding and bonding to metal. The manufacturer points out that its products have attained a reputation for meeting the most difficult operating conditions such as the extreme abrasion, shock and deterioration encountered in oil well drilling. BJ-built bearings, similar to these marine bearings, are used in Byron Jackson deepwell water pumps and for years BJ has manufactured the rubber impellers for a well-known marine pump line.

To assure uniform quality in these marine bearings it is emphasized that close control of every step in their manufacture is exercised, including the compounding of the special rubber formula within the BJ rubber plant.

Sale and service of these marine bearings is through regular trade channels under the direct supervision of Byron Jackson Co., according to Robert Kirk, sales manager of the marine bearing activity. Particular attention is being given to quick availability at dealer outlets and to prompt delivery from company stocks where required. Additional sales representation is also in the process of development, stated Mr. Kirk.

These marine bearings are of the full-molded type, capable of supporting the heaviest shaft loads without causing shaft deflection. They are considered ideal for high speed shafts, providing smoother operation at all speeds and loads, eliminating frequent bearing overhaul and replacement costs.

Even under severe abrasive conditions such as in shallow sandy water or in dredging operations, BJ Marine Bearings are claimed to last longer. Ordinary bearings and shafts wear under such conditions, allowing larger particles to enter the clearance between the shaft and the bearing and cause increasingly rapid wear.



BJ Marine Bearings are now available through Marine hardware and supply dealers. Specification details and any further information can be obtained from: PB Division, Byron Jackson Co., P.O. Box 2493, Terminal Annex, Los Angeles 54, California.

Red Wing Shows Four New Lightweight Marine Motors

Red Wing Marine, Red Wing, Minn., announces the addition of four new light weight, high speed gasoline engines to its "golden anniversary" line.

The company, which is this year celebrating 50 years in the marine business, will show the engines for the first time nationally at the National Motor Boat Show in New York in January.

William King, general manager of the company, stated that the new engines, to be known as the Meteor Series, will be equipped with the most modern, most

CAMPBELL MACHINE, INC.
SAN DIEGO 12, CALIFORNIA
BOATBUILDING & REPAIR MACHINERY REP'S
ANCHOR and CARGO WINCHES
Distributors
"UNION" DIESEL ENGINES

San Diego Marine Const. Co.
SHIP CONSTRUCTION
and REPAIRS
Marine Railways, Floating Drydock
Foot of Sampson Street
SAN DIEGO 12, CALIF

"wanted" features for craft ranging from kit boats to large auxiliaries and the largest of cruisers. The engines in the new series are the 20-hp. Meteor "20", the 60-hp. Meteor "60", the 110-hp. Meteor "110", and the 130-hp. Meteor "150". All are built for easy installation of Vee-Drive, and are expected to deliver the utmost in power, dependability and economical operation.

The company believes that the Meteor "60" will soon be one of the most popular power plants on water. Tests have shown that when installed on family cruisers and boats ranging from the extremely small to the large, the Meteor "60" delivers the most economical fuel consumption in the marine field.

The Meteor "20", redesigned especially for kit boats, runabouts and dories, is expected to be Red Wing's answer to the demand for small, light weight, compact power plants for owners seeking low prices and economical operation.

The Meteor "150" features power and stamina to spare for big cruisers. It is perfect for single or twin screw installations, according to Red Wing officials.

The Meteor "110", which is a high speed 6 cylinder engine, has been especially designed for express cruisers or light weight runabouts. This engine is also available in twin screw pairs for larger craft, Red Wing officials said.

Great Merchants Refrigerating House Reaches 65th Birthday

Merchants Refrigerating Company, with headquarters in New York City, is celebrating its 65th anniversary this year. Founded in 1889, in the infant days of the refrigerated warehousing industry, Merchants has grown from a one-plant operation in New York City's great produce district, to a nationwide operation. The company now operates nine great modern refrigerated warehouses across the continent from New York to California. Plants are located in New York City; Newark, New Jersey; Jersey City, New Jersey; Buffalo, New York; Hopkins, Minnesota; St. Louis, Missouri; and Modesto, California.

Merchants' nine refrigerated warehouses have a total storage capacity of 23,095,554 cubic feet, making Merchants Refrigerating one of the largest companies of its kind in the world.

Throughout the years, Merchants Refrigerating has kept pace with the fast-growing cold storage industry. Merchants' customers enjoy the benefits of fast, safe, efficient service made possible by ultra-modern handling and storage methods. These include completely palletized handling, blast freezing and teletype service.

In commemoration of its Anniversary, the company has prepared a brochure entitled "Merchants Refrigerating Company's Record of Progress in Refrigerated Warehousing." It contains a fascinating account of the growth of one segment in this large and important industry. Free copies of the booklet are available by writing to the company at 17 Varick Street, New York 13, N. Y.

Fish Magnifier attachment for Bendix depth recorders give the fisherman a close-up look at what's below the keel.

Bendix "Fish Magnifier" Adds To Usefulness of Sound Gear

An important new addition to the electronic line of Bendix Aviation Corp., Pacific Division, North Hollywood, is the "Fish Magnifier," an inexpensive attachment for Bendix depth recorders, which magnifies the recorder image in natural easy-to-read chart form. The magnifier permits using the Recorder for the overall picture and with the flick of the switch gives an enlarged image of any desired depth. The magnified image is enlarged up to 12 times and at the same time the sounding rate is increased, resulting in an unusually sharp image of good definition.

The Fish Magnifier was displayed at the Seattle Boat Show, November 20-28, where also was displayed the full line of Bendix depth sounders, automatic pilots and marine radio equipment.

Renneburg Bulletin Presents "DehydrO-Mat" Fish Meal System

Exceptionally comprehensive description of the Renneburg "DehydrO-Mat" fish meal drying system is provided in Renneburg Bulletin 854, just published by the famous Baltimore process equipment firm which has been in business more than 80 years, and whose fish reduction equipment is in use throughout the world.

The new drying system consists primarily of a very large furnace, 18' high, with exceptional provision for air mixing, temperature control, and recycling in drying gases for combustion. The dryer itself has 12' diameter in its retention section. Material moving through the dryer is handled by 600 adjustable flights.

The exhaust air fan is 18' high, with damper thermostatically controlled. It discharged into a cycle from which fines are recovered. The exhaust gases then pass through a wash tower and the insoluble portion is returned to the furnace or a separate incinerator, or both, for burning.

In addition to its description of this remarkable unit, the bulletin also includes material on numerous other items of the Renneburg process equipment line, many of them directly applicable to modern fish reduction.

York Promotes Executives

Two York Corporation executives, Ray K. Serfass, general sales manager, and J. M. L. Joslin, Manager, industrial relations, have been named vice presidents of the York, Pa., air conditioning and refrigeration firm, according to an announcement by Stewart E. Lauer, president.

Mr. Serfass graduated from York Corporation's student training program in 1932 and has been with the Corporation ever since, devoting all his efforts to sales and sales direction.

Fibreboard Opens in Chicago

Fibreboard Products Inc., with head offices in San Francisco, announced that they have recently opened a sales office in Chicago, Illinois. Norman T. Burke, who has been an employee of the company since 1938, has been transferred from the company's San Francisco sales office, to the newly opened Chicago office located in the Daily News Building on Madison Avenue.

PAUL W. HILLER
315 AVALON BLVD. WILMINGTON, CALIFORNIA
MARINE MECHANICAL EQUIPMENT
TEL: TERMINAL 44-538
Tel: TErminal 4-4538

NORTHERN PRODUCTS CORPORATION
Distributors
American and Canadian
MILD CURED and FROZEN SALMON
200 Bell St. Dock Pier 66
SEATTLE 1 U.S.A.

Your best Marine Insurance is a DANFORTH ANCHOR
INSURED with DANFORTH ANCHORS
THEY HOLD BEST... HANDLE EASIEST
Write for free 16-page booklet "Anchors and Anchoring."
DANFORTH® ANCHORS
2153 Allston Way
Berkeley 4, Calif.

KOHLENBERGER ENGINEERING CORPORATION
DEPENDABLE REFRIGERATION SINCE 1922
FULLERTON - CALIFORNIA
DEPENDABLE REFRIGERATION
SERVING PACIFIC FISHING FLEETS SINCE 1922
Our engineering staff is always at your service. Phone or write for name of nearest boat yard to serve you.
Foreign Inquiries Solicited
General Offices and Factory
FULLERTON, CALIFORNIA
Telephones
L.A. Mutual 6497 Lambert 5-3521
San Diego Sales, Parts & Service—Atwell Supply Co.
1150 Harbor Dr. FRanklin 9-2129

ADVERTISING INDEX

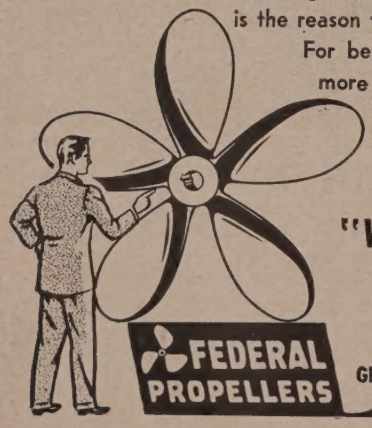
Adams Net & Twine Div. .. 21
Alaska Steamship Co. 74
Albina Engine & Mchne Wks. 50
American Can Co. ..... 2 ,3
American Marine Paint Co.. 26
Amerio Contact Plate Freezers, Inc. 60
Archer-Daniels-Midland Co. 69
Atlas Paint & Varnish Co. .. 59
Berglund Sales & Engr. Co. 52
Brownell & Co. Inc. 37
Brush Aboe, Inc. 28
Bryant's Marina 52
Byron Jackson Co., PB Div. 59
Camillo, J. J. 74
Campbell Machine, Inc. 74
Carruthers Co., E. H. 76
Caterpillar Tractor Co. 7
Classified Advertising 52
Coast Mfg. & Supply Co. .. 49
Columbia-Geneva Div., U. S. Steel Corp. 67
Columbia River Packers Assn. 64
Consolidated Net & Twine Co. 37, 46
Continental Can Co. 18
Crest Importing Co., Inc. .. 64
D'Acquisto & Sons, A. 52
Danforth Anchors 75
De Fever, Arthur 74
Deming & Gould Co. 6
DuPont de Nemours & Co., E. I., Nylon 32
Ederer Division 5
Edo Corp. 47
Electric Storage Battery Co. ..... Inside back cover
Enterprise Eng. & Mchny Co., Marine Diesels 54
Enterprise Mfg. Co. 48
Federal Propellers 76
Fibreboard Products Inc. ... 16
Fish Net & Twine Co. 29
Fishermen's Packing Corp... 57
Forster Shipbldg. Co. 52
Freeman, Doc 52
Freeman, Wood 53
Frohman & Sons, L. H. 67
General Petroleum Corp. .....Inside front cover
Hall-Young Co. 52
Hanson, H. C. 74
Harbor Boatbldg. Co. 53
Heminway & Bartlett Mfg. Co. 42
Hiller, Paul 62, 75
Hobbs Battery Co. 62
Hutchison y Asoc., Wm. H.. 76
Independent Salmon Canneries, Inc. 64
Industrial & Marine Engines, Inc. 41
Kelley-Clarke Co. 66
Keystone Batteries, Inc. 35
Kohlenberger Engr. Corp. ... 75
Larson Boat Shop, Al 52
Lasar Mfg. Co. 62
Linen Thread Co. 44
Long Beach Salt Co. 62
Marine Products Co., Pumps 41
McKinney Co., H. C. 52, 53
Merchants Refrigerating Co. 30
Mercury Marine Electric Co. 62
Metal Marine Pilot 53
Moffitt Inc., Lucian Q. 4
Murphy Diesel Co. 24
National Steel & Shipbldg. Co. 74
National Supply Co. ...Outside back cover—48, 57
N C Marine 35
New England Fish Co. 66
Nordberg Mfg. Co. 51
Nordby Supply Co. 35
Northern Products Corp. ... 75
Oceanic Sales Co. 66
Oxenberg Bros., Inc. 64
Pacific American Fisheries .. 6
Pacific Marine Supply Co. .. 8
Pacific Tel & Tel Co. 67
Pacific Towboat & Salvage Co. 52
PB Div., Byron Jackson Co. 59
Pauls Division 13
Petersburg Cold Storage Co. Inc. 74
Plymouth Cordage Co. ...38, 39
Radiomarine Corp. 59
Red Wing Motor & Mfg. Co. 11
Rudd & Cummings 41
San Diego Marine Constr. Co. 74
San Juan Fish. & Pack. Co. 71
Seaside Supply Stores 52
Shepherd Marine 59
Shore Line Diesel Maintenance 52
Snow-Nabstedt Gear Corp... 57
Standard Oil Co. 40
Standard Steel Corp. 73
Starr Net Co., A. M. 46
Stay-Tite Products Co. 62
Sudbury Laboratory 31
Tacoma Boatbldg. Co. 34
Tower Co., A. J. 50
Tubbs Cordage Co. 72
Union Oil Co. 36
U. S. Rubber Co., Industrial Clothing 49
U. S. Steel Corp., Columbia-Geneva Div. 67
Universal Motor Co. 46
Vita Food Products, Inc. 67
Washington Iron Works 52
West Coast Engine & Equip. Co. 4
Westgate California Tuna Packing Co. 65
White & Sons, Wilfrid O. 26
Woolsey Paint & Color Co.. 46

FEDERAL **PROPELLERS**

CONTAIN UP TO

30% MORE METAL

Check the weights of competitive wheels. You'll find that in many instances FEDERAL gives you as much as 30% more metal. And every last ounce of it PURE alloy . . . not one bit of scrap is ever used in casting these famous wheels. That is the reason they last much longer. For better performance and more for your money, use FEDERAL propellers.



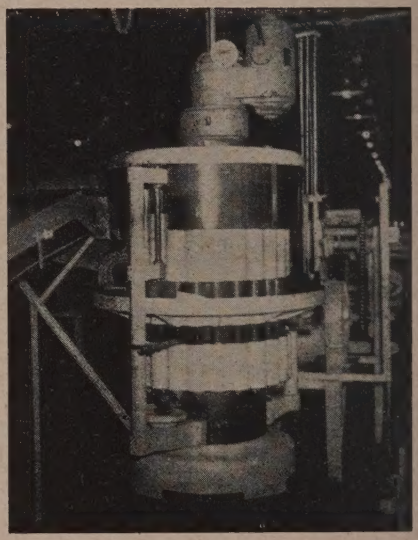
FEDERAL

"VIBRA-FREE"

Its popularity is growing by leaps and bounds

GRAND RAPIDS 3, MICH.

The PAK-FORMER



Leading tuna canners are now using the PAK-FORMER for their Chunk and Grated Style Packs. A variable speed drive permits filling speed adjustments of between 50 and 250 cans per minute. Available to the industry under similar terms as our PAK-SHAPER.

For Complete Information Write to

E. H. CARRUTHERS CO.

Engineers and Designers to the Food Packing Industry

P. O. Box 1332 Warrenton, Ore.

WM. H. HUTCHISON Y ASOCIADOS, S.A.

MAZATLAN, MEXICO

Fish Netting

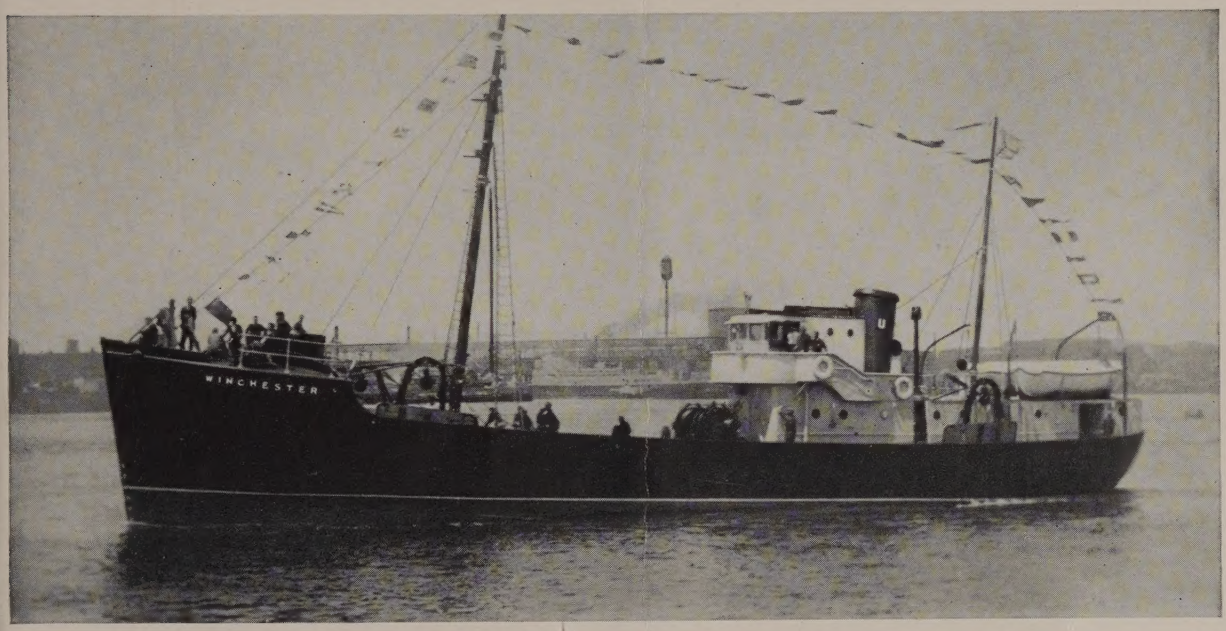
INTERNATIONAL FACTORY REPRESENTATIVES FOR FISHING, MARINE & ENGINE SUPPLIES.

Wire Rope

TELEPHONE MAZATLAN 3049 SAN PEDRO TERMINAL 21155

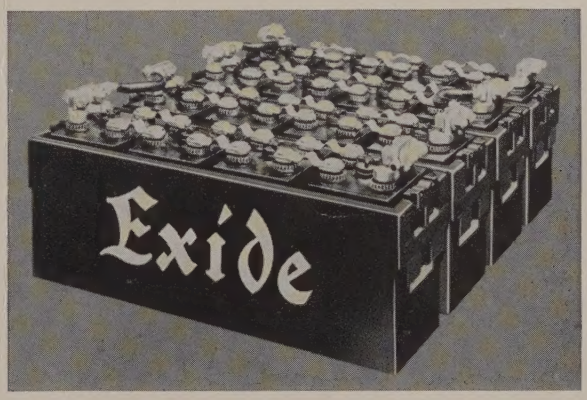
RUGGED, RELIABLE BATTERY POWER FOR FISHING BOATS

...comes best from heavy-duty Exide-Ironclads!



ON BOARD the Irving Usen Trawling Co.'s Winchester is a 56 cell TLM-13 Exide-Ironclad. It is used for Loran, fathometers, ship-to-shore telephone, small motors, and lights. Exide-Ironclads are engineered for the most trying conditions and have an exclusive construction that insures dependable operation, ample reserve power for the heaviest load. Service records prove that lower costs for operation, maintenance and depreciation make Exide-Ironclads your best power buy—AT ANY PRICE!

THE POSITIVE PLATES are the heart of any battery. Only Exide uses a slotted tube construction. By use of tubes, more active material is exposed to the electrolyte, providing *greater power*. Also, more active material is retained, giving *longer working life.*



RUGGED POWER for all fishing vessel needs! Exide-Ironclads give peak performance . . . on many jobs . . . for a long, long time. For full details, call your Exide sales engineer—or write for Form 5190 (Exide-Ironclad Batteries for Marine Service), and accompanying specification sheets.

Your best power buy
...AT ANY PRICE!

Exide®
IRONCLAD® BATTERIES

Exide INDUSTRIAL DIVISION, The Electric Storage Battery Company, Philadelphia 2, Pa.
Los Angeles, Calif. Seattle, Wash. San Francisco, Calif.

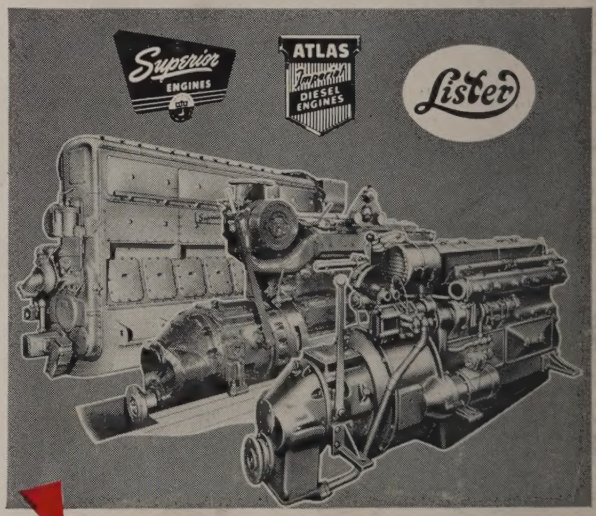
FISHING COSTS STAY LOW BECAUSE . . . . . .

they all enjoy economical diesel power!

THIS 103-FOOT DRAGGER depends upon a rugged 400 hp Superior Diesel for long trips and record hauls in the North Atlantic. Even under adverse conditions, Superior Diesels mean reliable, low-cost propulsion, and establish records for long life.

THIS FIRST PURSE SEINER built in Australia is powered by a 240 hp Atlas Diesel. The simple design of Atlas Engines means easy maintenance and lower weight per horsepower—while precision parts and heavy-duty frame insure exceptionally long life.

THIS WEST COAST SCHOONER uses a Lister FR2 to operate its refrigeration compressor and electric generator. Fishermen find that Lister's unique dual combustion chamber insures easy starting and fuel economy, in every type of auxiliary service.



IN THE WIDE RANGE of 4 to 1765 hp there's a Superior, Atlas and Lister Diesel for every marine power application. You can get complete information on these economical engines at the nearest sales and service office listed below.

DIESEL
DUAL FUEL
GAS

THE NATIONAL SUPPLY COMPANY
N·S·CO
ATLAS
Imperial
DIESEL ENGINES
Superior
ENGINES
DISTRIBUTOR OF Lister
DIESELS IN U.S.A.

THE NATIONAL SUPPLY COMPANY

ENGINE DIVISION PLANT AND GENERAL OFFICES: SPRINGFIELD, OHIO

SALES AND SERVICE POINTS: Gloucester, Massachusetts • Houston, Texas • Fort Worth, Texas • San Diego, California Oakland, California • Terminal Island, California • Ketchikan, Alaska • Washington, D.C. • Chicago, Illinois • Portland, Oregon • Astoria, Oregon • Casper, Wyoming • St. Louis, Missouri • Halifax, Nova Scotia • Vancouver, B. C. • Park Rapids, Minnesota • New York, New York • Seattle, Washington • New Orleans, Louisiana • Pittsburgh, Pennsylvania